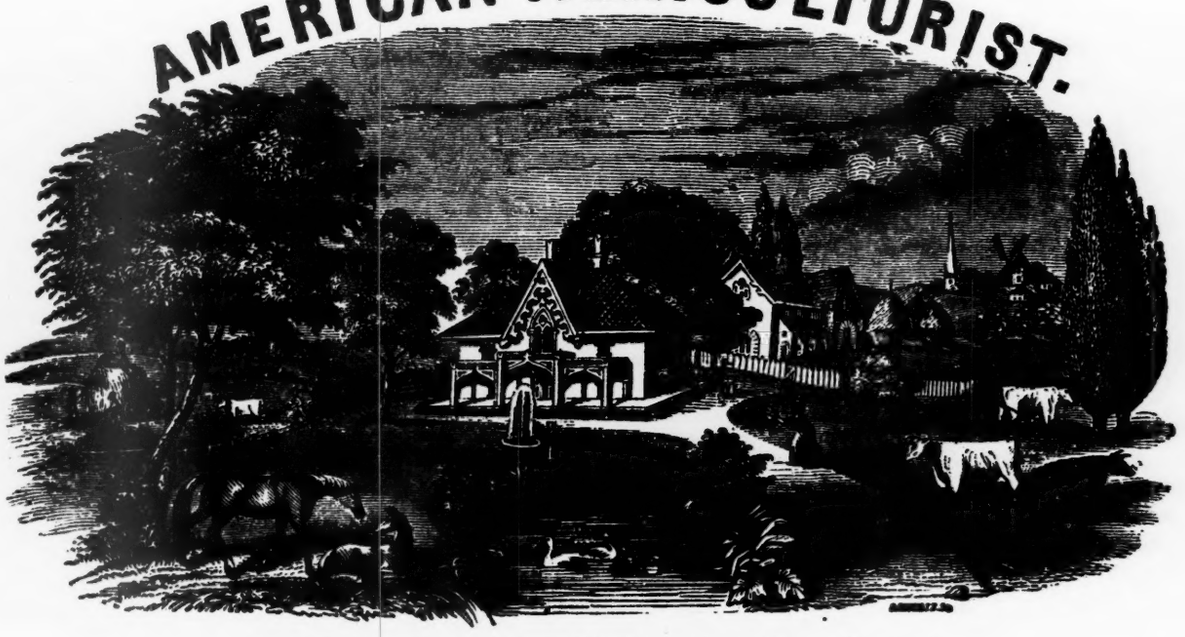
THE

AMERICAN AGRICULTURIST.



Agriculture is the most healthful, the most useful, and the most noble employment of Man.—*Washington.*

VOL. II. NEW YORK, JUNE, 1843. NO. III.

A. B. Allen, Editor. Saxton & Miles, Publishers, 205 Broadway.

THE DAIRY.

As this is the season of the year in which commences the laborious duties of the good housewife in the dairy, we have thought it advisable to call her attention to a better preparation of the articles of butter and cheese. In making butter, the essential requisites are, to preserve the utmost neatness and have everything sweet and cool; a fine quality of salt, and just enough of it for good taste and preservation, well worked in; every particle of the buttermilk worked out—not with the hand, as that softens, and consequently injures the butter—but with a wooden paddle. Thus prepared, butter will keep sweet a long time; bear transportation to a foreign market, and command an extra price. Very choice table butter is now worth 25 cents per pound in this market, and its average price, throughout the year, is about 20 cents, while the middling good qualities are worth only 13 to 15 cents. The same general observations of neatness, &c., may be made on the preparation of cheese, as we have given on that of butter, the choice kinds of which sell from 12 to 18 cents per lb. here, readily, while good ordinary quality is not worth over 5 to 7 cents. Of course, cheese at this high price is extra rich. It is put up in the common round shape, of about 14 lbs. weight, which is the most suitable size for family use. Each cheese has a canvass covering, and is placed in a wooden box by itself, and then put into casks, is thus sent to market, and arrives in the best of order. We do not enlarge upon this subject now, as it is our intention to soon visit the best dairy districts of the country, where we are promised all information regarding the most approved methods of making butter and cheese.

RAISING SILK.

We beg leave to impress upon our readers, the great advantage to the country and themselves, that will result from an indefinite extension of the silk culture in the United States. In the absence of a brisk demand and high prices for the ordinary objects of cultivation, we are confident no one article will pay better than the production of cocoons and reeled silk. We know that in Mansfield, Connecticut, and other places, where the raising of silk and manufacturing it into sewings, has been in existence for 60 years, many of the inhabitants have become comparatively rich by it, although

the operations have been carried on in a very limited way. The citizens of our own state are doing very little as yet in this cause, notwithstanding the legislature has offered a satisfactory bounty on the production of the raw article, and have further set a laudable example by paying a fair price for cocoons, and commenced the manufacture of it in the state-prisons. It was computed that the amount of cocoons raised in Connecticut last year, exceeded 117,000 lbs., while that of our own state fell short of 4,300 lbs., and that too with a population eight times as large, and even a greater proportion of territory, and this far exceeding the former in fertility! We believe we are rapidly lessening this disparity, yet not so fast as circumstances would justify. We again, therefore, earnestly commend this subject to the attention, not only of the citizens of our own state, but those of every state in the union, satisfied as we are, that no branch of rural affairs will pay better to the country and the producers.

SKETCHES OF THE WEST.—No. I.

CINCINNATI.—This is the largest and much the handsomest city of the west, and we think it is ever destined to maintain this rank. Its position seems to have been expressly made by nature for the site of some great town. It is a plain, nearly in the shape of a bended bow, a mile and a half broad in its widest part, and elevated about 100 feet from the water, terminated by broken ranges of picturesque hills from 300 to 400 feet high, the sides and tops of which, the town is already beginning to cover in broad terraces of brick and stone. On the top of one of these hills Mr. Longworth has had the liberality to make a large reservation for a public square, and if others can occasionally be appropriated and ornamented with trees, walks, and shrubbery, and proper attention be paid to the public and private buildings, it may in time become quite a magnificent city. It is surrounded by an exceedingly fertile country, and it has a very extensive trade, the most interesting branch of which to the farmer is the dealings in pork.

PORK BUSINESS.—In the January number of the Agriculturist, we gave some account of this, and the slaughter and packing houses; but the business done the present year is much greater than ever known before. It is estimated that upward of 250,000 hogs have been killed at Cincinnati the past season, with a greater average weight than any preceding year. Many of these were packed by English agents, sent out here expressly for this purpose, after their own method, for the market of Great Britain, the sale of which thus far has been quite satisfactory, and will prove encouraging for the pork-raisers of the west. In addition to the pork, great quantities of lard are put up here, 12,000,000 pounds at least the past year, worth nearly $500,000.

STOCK.—Of swine, as a matter of course, in the neighborhood of Cincinnati, where so many hogs are raised, one would expect to find choice breeds; nor would he be disappointed, for in no district of country have we ever seen as good animals generally prevail. Sheep are kept in considerable numbers, but very few choice fine-woolled flocks; which we think a matter of regret, as the soil and climate are both admirable for the purposes of sheep-husbandry. Of cattle, there are many varieties, the best of which, undoubtedly, are the Durhams. Among these, the choicest herd within our observation was that of Mr. William Neff, kept on his farm situated on a fine Macadam road, about seven miles from town, and it was a great pleasure for us, while staying at Cincinnati, to often visit these superb animals.

The herd is composed of a reserved lot, all imported, or bred directly by Mr. Neff from his own importations. The stock bulls are quite superior, and among them we thought most highly of Prince William and Young Prince. The cows also we found a choice lot, and no way inferior to the bulls. Those we most admired among the older ones, were Ruth, Profitable, and Princess, the first of which is a noted breeder. Of the younger ones, Victoria, Clifford, Georgia, and Louisiana, stood the highest in our estimation. The latter is a magnificent animal, and such as is rarely found. Everything for their accommodation is well arranged, and the stables, yards, and indeed all the appurtenances, could scarcely be bettered. Mr. Neff's swine are quite on a par with his cattle; he having the Berkshire recently imported in great perfection, and the English grazier, also imported, a nice, quiet, thrifty breed, and famous for making lard—a great desideratum now in the west. His piggery is extensive, and one of the best arranged we ever saw. The general plan is an alley in the centre, with ranges on each side for the animals; a cooking-house in front, where kettles are set, and bins formed conveniently around for the storage of meal, grain, and roots. Other things about this farm are worthy of notice, among which we shall not soon forget an abundant orchard and fine vineyard recently planted out.

NURSERIES AND GARDENS.—These abound in the vicinity of Cincinnati. That of Mr. Ernest we found

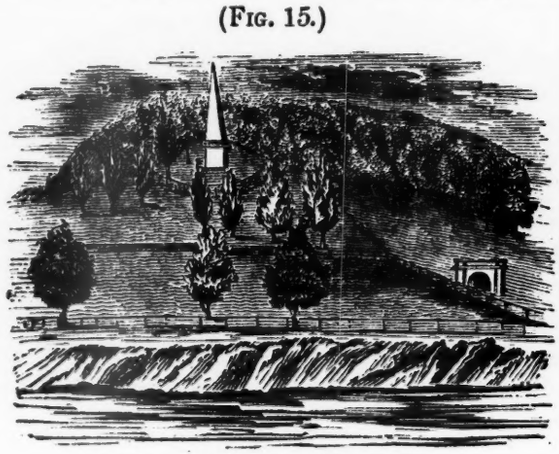
the most extensive. It is really well filled, and contains a numerous and excellent assortment. There are many gardens also, both public and private. Of the latter, that of Mr. Longworth is superior. Here are transplanted all the wild flowers of the country, for the purpose of experimenting with them, and we have no doubt some beautiful things will yet be brought out from this source.

The Ohio.—How swiftly glides the boat down the broad winding stream; how beautifully the hills break and group again, from reach to reach in the blue distance, crowned with lofty forests, the branches of the trees dotted with thick green tufts of the misleto, while below from their base to the water's edge, spread the wide fertile meadows, in green grass or tall corn, with large herds of fat cattle feeding upon their rich herbage. Fair villas, substantial brick or stone farm-houses, and the humble log-cottage, are sprinkled alternately along, and from distance to distance, we are brought up to land by intervening towns and villages. It may be called, indeed, from its sources to its mouth La Belle Riviére, for there are few streams in truth more beautiful.

We recollect being often asked in England if we did not find the Thames much superior to the Ohio. The Thames indeed! It has a few fine meadows and gentle hills, and is as wide as the Ohio perhaps, 60 miles or so from its mouth to London, and then it rapidly dwindles to a mere rivulet, while this keeps rolling on for nearly a thousand miles in one continued flow of uninterrupted magnificence, wildness, and beauty.

North Bend.—One of the most interesting places that we pass in descending the Ohio, is North Bend, 14 miles below Cincinnati, the residence of the late lamented General Harrison, and a green mound-like hill near to the house, enclosed in white palings, is now his final resting-place.

(Fig. 15.)



Tomb of General Harrison.

The tomb is of plain, solid marble, and accords with the character to whose memory it is erected, and the virtues and deeds that it is made to commemorate. When we last saw the Farmer of North Bend, he had been taken like another Cincinnatus, from his rural occupations and quiet, humble home, and stood amidst an admiring crowd of thousands, the acknowledged chief of millions of free people. To look upon that plain, simply attired old man, thus placed, thus surrounded, and thus honored, was a sight really sublime, and his sudden removal will long be mourned by a grateful nation.

We wish we could see the miserable out-buildings in front and immediately around this charming residence of General Harrison removed. It has now become a point of national interest, and is always shown to strangers; there should be nothing therefore to mar the view, and we would respectfully suggest to the son of the late President, that the fine lawn in front of the house be disincumbered of all else, save the noble trees and flowering shrubbery that now adorn it.

Louisville.—This is a fine city, built upon a high level bank of the river, and is about half the size of Cincinnati, and laid out in the same manner, the streets crossing each other at right angles. It has some good buildings, of which the Court-House and new Methodist church are among the most elegant. The rapids of the Ohio here extend 3 1-2 miles, with a fall of 24 feet, over a solid bed of limestone. These are passed except in high water, through a steamboat canal of about two miles in length, cut through the solid rock, reminding us, though without the length and depth, of the deep cut of the Erie canal at Lockport.

Louisville has a considerable trade, and is pretty largely engaged in hemp manufactures, the whole process of which is by machinery, driven by steam power. It is said that the manufacturing of cotton bagging does not cost over three cents per yard. This may seem very cheap, but a single power-loom will weave 250 yards per day with one hand to tend it, and all the other operations are equally facilitated. With hemp at $3 per cwt., the manufacturer can successfully compete with the imported fabric, and even without a protective duty, will soon drive the foreign article out of the market.

Culture of Poor Sandy Soils in Kentucky.—Journeying from Louisville to Frankfort, our attention was attracted upon the road to a burly-headed negro, with a long beard somewhat grizzled with age, encased in stout cow-hide boots, hickory-col-

ored jean clothes, and a huge, white felt hat, the wide brim cocked up before and behind in military style, giving him a rakish and somewhat consequential appearance. He sat astride the bare back of the nigh ox of his team, hitched on to one of the smaller kind of Dutch wagons filled with corn in the ear, and topped off with vegetables, and fresh killed pigs, and poultry "fixins" of various kinds, bound for the Louisville market. He flourished a tall whip, which was as thick as our arm, and braided from hemp of some six feet length. He sat him well, with a jaunty air, and was cheering on his patient team by singing in a lugubrious tone, to the popular old negro air of "Long time ago," probably an improvisatrized song, every stanza of which, in order to take fresh breath, and give vent to the exuberance of his feelings, he wound up in a chorus of loud cracks of his whip.

(FIG. 16.)

SAMBO.

"Den goin' down to Loudeville,
Long time ago,
Where all de wagons chucky fill
Stan' in a row;
Crack! crack! crack!

"Ob pig and turkey chicken big,
Long time ago,
Who neber more his foot he dig,
In garden ob Sambo;
Crack! crack! crack!"

Here the coach stopped to deliver a passenger, while another took the opportunity of questioning our ebony serenader.

"So then, Sambo, you have a garden it seems?"

"Yes, sartin, master give me garden, and one day a week to work him."

"And what do you raise there?"

Here he handed out sundry vegetables, and among others a huge carrot about as big as his leg from the hip down (not including his foot though), measuring it off with great pride.

"Pray how did you produce that?"

He placed his finger significantly upon his nose, and replied: "Master think him garden never grow nothin', poor dry soil; I wheel him on manure, I work him late, I work him arly."

As working "late and arly," as Sambo had it, when the dew is on the ground, is the very philosophy of tilling dry soils, and to our certain knowledge has been the means of doubling crops in several instances, without any addition of fertilizing materials, we began now to listen to the colloquy with great interest.

"Sambo, you are a genius to grow such carrots, a scientific agriculturist, did you ever read Davy or Tull?"

"Tull," he replied with a grin, "who be he? Dog that tree de coon?"

"Not exactly, but do you produce other vegetables equally large?"

Here he put his finger to his nose again. "Pa'snip in the spring—him grow a mighty smart chance all winter."

"Very well, Sambo, very well, indeed; but now pray tell me how do you contrive to make such fat luscious-looking poultry there, as I see in the wagon? I fancy that they did not grow in the same way that your carrots and parsnips have here."

"I reckon not ezakly," said he, and burst into a loud laugh, and commenced dancing all round the coach.

"Well, you foolish fellow, we must be off in a minute, here is a *bit* (a shilling-piece) now tell me."

Taking the money handed him, he turned up the whites of his eyes, and commenced: "Master's corn-crib purty handy I reckon."

"Very likely, but that's not all."

"Beef liber mighty plenty, and pork crackalins.'

"I don't believe you."

"Roast him possum then, sweet taters, and—"

Here everything was ready again, and our impatient driver put up his horses without waiting for the cautious Sambo to finish his method of fattening fowls, and the last we saw of him, he was again astride his favorite ox, singing out at the top of his voice:-

"What now you ask de pound for coon?
Long time ago,
Ah, massa, cheap at picayune,
Times be so low.
Crack! crack! crack!"

Will any Kentuckian please to furnish us with the peculiar manner that the colored people so delicately fat their fowls, the knowledge of which, to our great regret, we were cut off from obtaining of the redoubtable Sambo?

SHOW AND FAIR OF THE N. Y. S. AG. SOCIETY.

In another part of this No. we have published a list of the premiums, &c., for the forthcoming Show of the N. Y. S. Ag. Society; and we must confess, that after all that has been said upon the subject of classification, and the great dissatisfaction it has given, placing animals together of distinct breeds, to be judged of necessarily by the same rules, that we are somewhat surprised the executive committee have not made a different arrangement. They might with just as much propriety have put long-woolled, middle-woolled, and fine-woolled sheep together, for there is scarcely any more distinction in these breeds, than there is between Durhams, Herefords, and Devons. Had the distinction asked for so often by the breeders of Herefords and Devons, been made, there would doubtless have been a good show of these animals at Rochester, next September; now the owners of the best herds declare, and as we think, in justice to themselves, not a hoof of theirs shall appear upon the ground; for shown against the Durhams, the latter must infallibly beat them. We must confess we think the arrangement a very unfair one: it is utterly discountenanced in England, and we trust that the committee will see the justice of reviewing their proceedings, and altering the list forthwith, so as to give the Herefords and Devons a chance among their own kin. We think, also, that the meeting is appointed at the worst time that it well could be; the 19, 20, and 21 September, are the very days, above all others, to expect an equinoctial storm. Were it not that the farmers are usually very busy in getting in their wheat, we should say that the 5, 6, and 7 September, would be the best time for holding the show; but in consequence of this, it might be advisable to delay till the 12, 13, and 14, but certainly not later. The committee should recollect, that from the position of Rochester, we may have a large number of Canadian gentlemen over, besides many from Ohio and the whole lake region; everything, therefore, should be so arranged, as to make the meeting pass off to the very best advantage. In connexion with this subject, we subjoin the following challenge:

To the Stock-breeders of the state of New York, or elsewhere.—I will enter for a sweepstakes, ten dollars entry, a three quarter bred Durham steer, 5 years old in May, 1843, fed while a calf on skimmed milk, and poorly at that, and after three months old, with nothing but grass and hay till three years old, and since then wintered on straw. He has never been fed a bushel of grain or roots, and has run out doors. I will show him against any animal of the *common* breed at the State Fair, in Rochester, in September next, to *prove* that *grade* Durhams will bear hardship and rough keep equal to the native cattle, and retain their superiority of points. He was got by a thorough-bred Durham bull.

I will also show a 2 year old thorough-bred Durham heifer, kept in the same manner, except sucking her dam for four months, which run out in the straw yard through the late severe and long winter, against any *native* heifer of like age, for the same purpose and for the same sum—both animals to be judged by one of the cattle committees selected by the Society.

Any person wishing to compete with me in this challenge, will send notice to Luther Tucker, Esq., secretary of the society, Albany. It is understood that no animal thus exhibited, is to be fed anything but grass in good pasture. L. F. Allen.

Black Rock, May 9th, 1843.

SIMPLE DIRECTIONS FOR THOSE EXPOSED TO COLD AND WET.

The danger incident to excessive exposure to cold and wet, to which the laboring classes are liable, might be obviated by moderate attention to a few simple rules, if observed faithfully, immediately after such exposure. This is a matter, which, however apparently trivial it may appear to some, involves much of human comfort. We have been close observers on this subject, and much exposed ourselves in a variety of climates, and can therefore speak from experience.

In the first place, lay aside all boyish apprehension of being thought *old-womanish*, and immediately after extreme exposure, remove your damp clothing, and having briskly chafed the skin with coarse flannel, a crash-towel, or a flesh-brush, before a good fire, and put on dry clothes; refresh yourself with a light but substantial supper of soup,

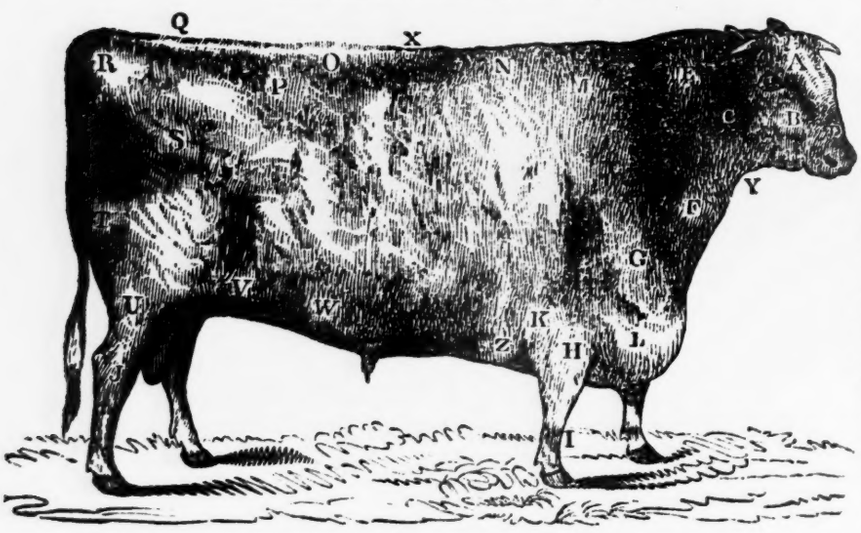
meat, and vegetables, or bread crumbed into boiled milk, with the addition of a little cayenne or black pepper, or if you have neither, what answers as well, a red pepper or two, thrown into the milk when boiling—an article, which the smallest patch of ground pertaining to the poorest, should be made to bear. If the exposure has been great and you are much exhausted, then retire, directly after supper, to a well-covered bed, and our word for it, the next morning finds you as well prepared for a good breakfast and active duty as ever. These rules have a reference to summer as well as winter, and if followed by those in our western country, whose duty calls them to new or low lands, the more essential is it to attend to them closely.

From a careful observation of this very subject, we believe it is the want of due regard to some such cautions, and sitting out in the evening air after the day's work is over, that our working men, during the warm season, are so often prostrated with that wretched and discouraging disease, the fever and ague, to which they are peculiarly exposed. In short, it is not great exposure, but great neglect after it, which causes to that large and valuable class of the community, our laboring population, so much disease and sickness. Be persuaded of the truth of this, act upon our suggestions and be temperate, and you may hope for a cheerful and vigorous old age.

THE POINTS OF A DURHAM BULL.

We have the pleasure of herewith presenting to our readers, the portrait of the celebrated prize bull, Cleveland Lad, the property of Thomas Bates, Esq., of England. We have his portrait in size to match the Duke of Northumberland, figured in the May number, which we shall give in our next, together with a brief description of him. For this reduced sketch, and the lettered points of the animal, we are indebted to the pencil of Francis Rotch, Esq., of Butternuts, Otsego county, in this state; quite life-like and finely is it done too. We hope he may favor us hereafter with sketches of some of his own animals, a choice herd of which he has bred with much care and attention. In the mean while, the young breeder would do well to study this cut thoroughly, for the animal figured here excels in all essentials, and it is lettered and explained in such a manner, as to give the reader a correct knowledge of the technical terms of the outside parts which constitute horned cattle.

CLEVELAND LAD.—(FIG. 17.)



EXPLANATION.

A—Forehead.
B—Face.
C—Cheek.
D—Muzzle.
E—Neck.
F—Neck vein.
G—Shoulder point.
H—Arm.
I—Shank.
J—Gambril, or hock.
K—Elbow.
L—Brisket, bosom, or breast
M—Shoulder.
N—Crops.
O—Loin.
P—Hip, hucks, hocks, or huckles.
Q—Crupper bone, or sacrum.
R—Rump, or pin bone.
S—Round bone, thurl or whirl.
T—Buttock.
U—Thigh, or gaskit.
V—Flank.
W—Plates.
X—Back, or chine.
Y—Throat.
Z—Chest,

The Property of Thomas Bates, Esq., Kirkleavington, England.

Tour in England. No. 14.

DAIRY STOCK.—It has been a source of constant experiment and anxious inquiry, for more than a century, by the dairy-men and cow-keepers of England, to ascertain which is the best and most profitable breed of cows for milk, and the result seems to be, when food is plenty, that the Short-horns have won the palm, and have been established in the first rank for a considerable time without rivals, or the possibility that they ever can be beaten. And by Short-horns we mean, not only such as are strictly herd-book animals, but those also, of

cognate family; such as exist in the counties of Yorkshire and Durham, and are severally known by these names.

The quantity of milk that these animals have repeatedly given, is so great as to have been considered worthy of record in the parish annals of different localities; but inasmuch as we did not see these records, and are unacquainted with the circumstances of feed, &c., which caused such great productions, we shall not give the particular reports we heard concerning them, merely premising that it has been, in several instances, over 40 quarts per day, wine measure. This quantity will not appear so extraordinary to the reader when he has finished this article, and learns the manner in which the cows here are kept and fed.

Next to the Short-horns, as a dairy beast, the Ayrshires seem to enjoy the greatest reputation. Mr. Rankine, in the Reports of Select Farms, maintains that Mr. Aiton's statements of the milking qualities of the Ayrshire are too high on the average. Mr. R. asserts, however, that he had seen 18 Scotch pints (36 English quarts) drawn from a cow in one day; but this was of very rare occurrence. We saw quite a number of these animals in different parts of the kingdom, but the general statements which we received of their yield in the best three months of the season, was from 16 to 24 quarts, averaging perhaps 20 quarts through the summer. It is possible in their own fine grazing districts of Ayrshire, and on their peculiar food, that the best selected herds may average more than this. Count de Gourcy, in his late Agricultural Tour in Great Britain, states on the authority of Mr. Fandley of Maybol, that his cows during the best part of the season, gave from 38 to 45 quarts of milk per day. We should like to know what kind of quarts Mr. Fandley means, for the statement in English measure seems to us incredible. Unless the cows were *fed* with *milk itself*, we can not believe it possible for any animal of the size of an Ayrshire, to eat food sufficient to produce so enormous a quantity of milk. We have seen one cow only in the United States that gave 41 quarts per day, and she was as large as a good-sized ox, and was stuffed during the time with as much of the most succulent grass as she could eat.

Be these statements, however, as they may, the Ayrshires are undoubtedly a superior race of dairy stock; although, it must be confessed, that they have as yet rather disappointed expectation when removed from their own district. Yet, whatever their good qualities are, they have undoubtedly derived them from the Short-horn cross, and this becomes the more apparent to us, since the cross of Durham bulls upon our own native stock, gives a produce in repeated instances, of the same color and general characteristics as the Ayrshires, which proves them to a certainty a cognate breed.

The third breed in point of dairy properties, is the Jersey cow; or as at present improved, when we take the superior quality of the milk into consideration, many would rank it first, as the extraordinary quantity of 19 pounds of butter has been made from one of this breed in a single week. Youatt, in his work on British cattle, describes the Jerseys under the title of Alderneys, and gives a very meager and unsatisfactory account of them. In consequence of large importations, they abound now throughout the south of England, and, as we were informed, have been greatly improved in Jersey within the present century. This has mainly been done by establishing a scale of points, which forms the criterion in judging of dairy stock; the only measure in our humble judgment, calculated to ensure a steady, scientific improvement in any breed of animals.

SCALE OF POINTS FOR COWS AND HEIFERS.

ART. I. Breed, on male and female sides, reputed for producing rich and yellow butter . . .	4
II. Head small, fine and tapering; eye full and lively; muzzle fine and encircled with white; horns polished and a little crumpled, tipped with black; ears small, of an orange color within .	8
III. Back straight from the withers to the setting on of the tail; chest deep and nearly of a line with the belly	2
IV. Hide thin, moveable, but not too loose, well covered with fine and short hair of good color	2
V. Barrel hooped and deep, well ribbed home, having but little space between the ribs and hips; tail fine, hanging two inches below the hock	5
VI. Fore legs straight and fine; thighs full and long, close together when viewed from behind; hind legs short, and bones rather fine; hoof small; hind legs not to cross in walking . .	2
VII. Udder full, well up behind; teats square and largely placed, being wide apart; milk-veins large and swelling	4
VIII. Growth	1
IX. General appearance	2
Perfection for cows	30

Two points shall be deducted for the number required for the perfection of heifers, as their udders and milk-veins can not be fully disclosed.

No prize shall be awarded to cows having less than 21, or to heifers having less than 19 points.

The color of the Jersey cows is a reddish-brown, dun, yellow, or light-red ground, mingled with more or less white; light-red and white we most admired. They are rather above the medium height, and of light carcase; fine, clear, waxy,

short, turned-up horns; long, clean head; beautiful, mild, liquid eyes; thin neck; shoulders and limbs as fine as those of a race-horse; sharp back; light quarters; and a soft, thin skin. They suit the mild and equable climate of Jersey, Guernsey, and the south of England, but are too fine and delicate for the extremes of America. Their skin is so thin, that the flies in summer would torment them greatly on the one hand, and the cold of winter pinch them on the other. We have seen a few ordinary animals of this breed imported into the United States.

Of the other breeds of cows in Great Britain, as dairy stock, little can be said, except in favor of the Devons, as improved principally by Mr. Coke, Earl of Leicester. Mr. Bloomfield, one of his tenants, and who probably was the main instrument of the improvement, challenged all England to milk against his herd. There is no doubt but they are superior milkers, although we think the challenge was rather a bold one. Certain it is, however, that they beat the Ayrshires sent into that district, and tried alongside of them. We merely had a verbal report of this, and can not say whether the trial was sufficiently thorough to decide the respective merits of these breeds as dairy stock. The Devons in size, and all good qualities, have been so much improved within the last quarter of the century, as to make any published account of them which at present exists in English books, very imperfect.

We now come to the manner of keeping cows in Great Britain, in the best dairy districts, which is the very antipodes of our system. At home, it often seems to be the study of the dairy farmer, to see what is the greatest number of raw-boned, skinny animals he can support on a given quantity of land; and what is the thinnest and shortest amount of grass that will keep the breath of life in their bodies. Here, it is totally the reverse; and they endeavor by supplying an abundance of succulent and nutritious food, to see what is the greatest quantity of milk that can be obtained from each cow. These are accordingly kept housed in cool stables during the heat of the day, where flies can not torment them, and are fed on fresh cut vetches, grass, or clover, and toward evening are turned into rich pastures to graze till the next morning. In addition to this, they are frequently fed a mess of brewers' grains night and morning, or bean or barley-meal, mixed up with a little cut straw or chaff, to prevent their cloying. This, with strict attention to the breed, is the only secret of the large average production of milk from cows in Great Britain, which so astonishes us at home We do not contend, however, that the English method of feeding should be strictly followed in our own country, except in the vicinity of large towns, where in consequence of the high price of milk, and the readiness of sale, we are sure this would be the best course to pursue; but in every district, however remote, we think that a more equable abundant, and better quality of food should be provided; for on this depends not only the quantity, but the quality of milk, and by a parity of reasoning, that also of the butter and cheese.

THE ROSE.

(Fig. 18.)

We here present to our fair readers the queen of flowers, the rose—the "lady rose," the truest emblem of themselves and charms. It is a flower so well known, and so universally cultivated, that it is quite unnecessary for us to say one word upon the subject. The varieties are almost countless, and perhaps no one country produces a greater number, naturally, than our own; some of which, especially those from the prairies, have been introduced into England and other parts of Europe, and are highly valued there. Every lady should have them in her yard and garden in summer, and in her parlor in the winter. They are delightful to the eye, and fragrant to the smell, and add cheerfulness and beauty to all around them. Then cultivate the rose—the "lady rose" above all other flowers.

ORIGINAL CORRESPONDENCE.

We would call attention to the suggestions of Dr. Cartwright in the excellent article which follows, particularly in the sixth paragraph, where he explains how unhealthy stagnant waters, bogs, and marshes, may be converted into fruitful rice-fields. We are also of opinion with him, that rice may be cultivated to advantage much farther north than has ever been attempted. A fair, wild variety grows abundantly on the shores of Lake Superior; and why may not rice be acclimated from one degree to another north, as far as corn, which is evidently, originally, a tropical production?

For the American Agriculturist.

CULTIVATION OF RICE.

Natchez, March, 25, 1843.

MR. ALLEN, DEAR SIR: In answer to your inquiries about rice and the comparative product of what is called *upland* and *lowland*, I can not give you much information. What little I have is at your service. Together with many others, you seem to have taken for granted, that there is a variety of rice adapted to upland cultivation, and another to lowland. Certainly, there are many varieties of rice; but I am induced to believe that they are all essentially aquatic. All the varieties, yet discovered, flourish best under the inundation system of culture; yield more to the acre, give less trouble, and require less labor. Nevertheless, each variety grows pretty well on light, moist uplands, without irrigation, when cultivated with the hoe or plow. The product, however, is so much less than that by the irrigation system, and the labor of tillage so much more, that the upland producer never can compete successfully with the lowlander. The former may curtail his expenses by growing rice for domestic uses, but he can not, very profitably, produce it for sale. Besides the ten-fold labor, which rice on uplands requires, in comparison to that cultivated by the irrigation system, it can not be sown thick enough to make a larger yield per acre. Space must be left for the plow or hoe to till the rice, which is not necessary in those localities where it can be overflowed at will, and the water drawn off as occasion may require.

The method pursued on the rice lands of the lower Mississippi, is to sow the rice broadcast, about as thick as you sow wheat at the north, and harrow it in with a light harrow having many teeth; the ground being first well plowed and prepared by ditches and embankments for inundation at will. It is generally sown in March. Immediately after sowing, the water is let on, so as barely to overflow the ground. The water is withdrawn on the second, third, or fourth day, or as soon as the grain begins to swell. The rice very soon after comes up and grows finely. When it has attained about three inches in height, the water is again let on; the top leaves being left a little above the water. Complete immersion would kill the plant. A fortnight previous to harvest, the water is drawn off to give the stalks strength, and to dry the ground for the convenience of the reapers.

A different method is practised in the northern part of Italy. The seed is sown in April; previously to which it is soaked a day or two in water. After sowing, about two inches of water is let in upon the ground. The rice comes up through the water, which is then drawn off to give the plant strength, and after some days, is again let on. The rice is more apt to mildew under this practice, than our method of letting the water on about the time the Italians draw it off. Mr. Jefferson, in his memoranda of a journey into the northern part of Italy in 1787, published in 2d Vol. of his correspondence says, that in the neighborhood of Milan, "they first plow the ground, then level it with a drag-harrow, and let on the water; when the earth has become soft, they smooth it with a shovel under the water, and then sow the rice *in the water.*" The same measure of ground yields three times as much rice as wheat. The only labor, after sowing, is to see that the rice is properly irrigated, except in some localities where aquatic plants prove troublesome, the water effectually destroying all others.

The rice-grounds of the lower Mississippi produce about seventy-five dollars worth of rice per acre. The variety called the Creole white rice is considered to be the best. In the eastern part of the State of Mississippi, called the "*piney woods,*" rice is very generally cultivated on the uplands. Although it can not be made a profitable article of export, yet it affords the people of that interior region an abundant supply of a healthy and nutritious food for themselves, and a good provender for their cattle, and makes them independent of the foreign market. Unlike other kinds of grain, it can be kept for many years without spoiling, in a warm climate, by simply winnowing it semi-annually, which prevents the weevil and a small black insect that sometimes attacks it. It is cultivated entirely with the plow and harrow, and grows well on the pine barrens. A bull-tongued plow, a kind of shovel-plow drawn by one horse, is driven through the unbroken pine-forest; not a tree being cut or belted, and no grubbing being necessary, as there is little or no undergrowth. The plow makes a shallow furrow about an inch or two deep, the furrows about three feet apart. The rice is dropped into them and covered with a harrow. The middles, or spaces between the furrows, are not broke up until the rice attains several inches in height. One or two plowings suffice in the piney woods for its cultivation—weeds and grass, owing to the nature of the soil, not being troublesome. A similar method of cultivation obtains on the prairie land of the northwestern states.

Rice, like hemp, does not impoverish the soil. On the contrary, it is a good preparatory crop for some others, as Indian corn. The pine barrens of Mississippi would produce rice ad infinitum, if it were not that the land, after a few years, owing to the sandy nature of the soil, becomes too dry for it. It has been ascertained by Arnal, that 12 pounds of wheat-flour and 2 pounds of rice will make 24 pounds of an excellent bread, very white

and good; whereas, without the addition of rice, 14 pounds of flour will only make 18 pounds of bread. Like other kinds of grain, rice adapts itself to the soil and climate, and particular mode of cultivation; but if the seed be not changed, or selected from the best specimens of the plant, it will ultimately degenerate. Thus in Piedmont, after a long series of years, the rice became so much affected with a kind of blight called the *brusone*, as to compel the Piedmontese to import fresh seed in 1829, from South Carolina. When Mr. Jefferson visited Piedmont in 1787, the exportation of seed-rice or rice in the husk was punished with death. The American rice introduced into Piedmont escaped the *brusone*, but it was some years before it adapted itself to the soil and climate. Some years ago, a French traveller by the name of Poivre, finding rice growing in great perfection on the mountains and high lands of Asia, particularly Cochin China, named it "*riz sec*" or dry rice, and sent the seed to Europe, where many experiments were made with it. It yielded no better than any other kind of rice, and was found like all others to succeed best when inundated. The reason why it yielded so much more in Asia than in Europe, can be readily accounted for, by the natural inundations it received from the excessive rains during the monsoons.

The discovery of a dry or upland species of rice was for a long time a desideratum to the European agriculturist; because both France and Spain interdicted the cultivation by inundation on account of its supposed insalubrity. But no variety has been discovered which yields as much out of the water as it does in it. There are many localities in the United States, where the culture of rice by the irrigating system, would rather serve to make the surrounding neighborhoods healthy instead of sickly. It is generally admitted, that a given surface of ground completely inundated, is much less unhealthy than the same surface partially inundated, or *in transitu* between the wet and the dry state. Hence, mill-ponds which partially dry up in the summer, are fruitful sources of disease. Some of the best rice is said to grow on the bottom of mill-ponds. Nothing more is necessary, than to make the bottom of the mill-pond perfectly level, and then to overflow the whole surface just deep enough to keep the top leaves above water. As if to show, that unhealthfulness is not necessarily connected with the culture of this valuable grain, nature has imposed a law upon it, ordering that it should flourish better when overflowed with pure running water than with the stagnant waters of impure lakes and marshes. If the mathematician with his leveling instrument were called to the aid of the agriculturist, it would be a very easy matter, in many localities, to mark out the course and required depth of those drains, which would give motion to stagnant waters, and convert many unhealthy and impenetrable bogs and marshes into fruitful rice-fields.

The progress of agriculture is very much impeded by error and confusion in names, which can never be corrected until the Botanist comes to its aid. Thus, on the Rhine I met with a species of spring-wheat, the *triticum monococcum*, cultivated under the name of *riz sec* or dry rice. This kind of wheat is particularly adapted to cold, mountainous regions, with a poor silicious soil, and well deserves the attention of the American people, not as rice, but as wheat. In Alsace it is called "*epeautre de mars*," or rather, "*la petite epeautre*," to distinguish it from the *triticum amyleum*. There are two kinds of rice, which are said to succeed best on uplands; the long and the round. The former has a red chaff, and is very difficult to beat. The latter shakes out, if not cut as soon as ripe. They nevertheless succeed best under the inundation system of culture. In the eastern hemisphere, rice is cultivated as far north as the 46th degree of latitude. The climate of the United States is better suited to it than that of Europe, because our summers are hotter. In the northern parts of China the variety called the imperial rice, or *riz sec de la Chine* (the *oriza sativa mutica*), is more precocious than any other, is said to yield a heavy harvest, and to constitute the principal food for the people of that populous region. But it has succeeded no better in Europe than any other kind of rice.

The best rice-lands of South Carolina are valued at five hundred dollars per acre, while the best cotton-lands sell for a tenth part of that sum, proving that rice is more profitable than cotton. The profits of a crop should not so much be estimated by the yield per acre, as the number of acres a laborer can till. After the land is properly prepared for inundation, by levelling, ditching, and embankments, a single individual can grow almost an indefinite quantity of rice. Rice is no doubt ultimately destined to supersede cotton in a large portion of Mississippi and Louisiana. There is a body of the richest alluvial land in the world, lying in the southern part of this county, Adams, and the adjoining county of Wilkinson, not forty miles from Natchez, containing upward of one hundred thousand acres; many entire sections of it, at this very day, belonging to the United States government, and subject to entry, and the balance, including the improvements, not valued at more than from ten to fifty dollars per acre, which at very little expense could be converted into the most productive rice estates. There is a large lake, called Old River, of some twenty miles in length by a mile in width, forming the boundary between Adams and Wilkinson counties. This lake, by an embankment two hundred yards in length, could be cut off entirely from the Mississippi river, and would serve as a reservoir to receive the water from the rice plantations, while the waters of the Homochitta river could be made, at all times, to overflow the rice-fields. On the coast, near New Orleans, the water of the Mississippi itself is conducted through ditches to overflow the rice-grounds. But as the banks have only a very gentle slope backward, the water has to be conducted a mile or more, unless the river be very full, before it arrives at land sufficiently low to inundate. Farther backward the swamps set in; thus limiting the rice lands to a narrow strip behind the cotton and sugar-lands, and in front of the swamps. But in the region of country just referred to, the Homochitta river coming down from the hills could be made to overflow the Mississippi bottoms up to

the levees on the margin of the great river itself. The lake just mentioned would at all times afford an ample reservoir for the effete waters from the rice estates. It is true that a large portion of the Homochitta river falls into the lake, but it is equally true that a dam, not much exceeding a common mill-dam, would turn the Homochitta in another direction, viz., into Buffalo river, about half a mile distant, through a natural canal or bayou. The banks of the Homochitta, from the place designated for the dam, to its present mouth, a distance of fifteen miles, occupy a higher level than the Mississippi bottoms; thus affording every facility for irrigation with very little expense or labor.

Lake Concordia, a similar lake in extent, lying a few miles west of Natchez, has lately had its communications with the Mississippi river closed by artificial embankments, called *levees* in this country. The consequence is, that at the moment I now write, the water in the Mississippi river is some 15 feet higher than the water in Lake Concordia. When the Mississippi overflows its banks, I have never less than ten feet bank at my plantation, the lowest ground on Lake Concordia. The lands on Lake Concordia can not, however, as you might suppose, be converted into rice plantations by conducting the water from the Mississippi river, because it is only when the Mississippi is very full, that they could be inundated at all, and then only partially. But if there were in the vicinity of Lake Concordia an inland stream, like the Homochitta, tumbling from the hills, you can readily perceive how easy it would be to inundate them at pleasure, and drain the water into the lakes. I mention the section of country in Adams and Wilkinson counties, not because it is the only one favorably situated for the culture of that most profitable and useful grain, rice, but merely to answer your inquiries in part, by giving you a glimpse of some of the agricultural resources of this section of country, which can not be understood without some allusion to its topography. However good a handmaid chemistry may be to the farmer or planter, he should not be taught to expect too much from it to the neglect of agricultural topography. It is the science of agricultural topography which lies at the root of those wonderful improvements that have made the Lombardo-Venetian kingdom rival, and even excel, England in agriculture. But I have not time, at present, to answer your inquiries in regard to the system of irrigation so successfully practised in the north of Italy. Very respectfully, your obedient servant,

SAMUEL A. CARTWRIGHT.

For the American Agriculturist.

REMEDIES AGAINST THE TURNEP FLY.

Buffalo, April 25th, 1843.

As the cultivation of the different kinds of turnep is becoming somewhat extensive in the United States, and wherever adapted to soil and economical feeding, it is a valuable crop, a few hints for their protection against enemies may be useful. The principal danger to the turnep plant is immediately after it appears above the surface of the ground. There are a variety of insects that feed upon and destroy it, during the first few weeks of its existence; but its most considerable enemy is a small black bug, that seizes upon the tender cotyledons the moment they make their appearance. Where the enemy is not in sufficient force to consume all the young leaflets as they appear, the plant will make a gradual, though slow progress; and when so far advanced as to be able to put forth its larger and more fibrous leaves, it will generally reach maturity. But it must be remembered, that any diminution of its leaves, especially in its early existence, is prejudicial to its growth. The leaves are to plants, what the lungs are to animals, and in nearly all cases they superadd, in no small degree, the functions of the stomach also; for in addition to throwing off a portion of the surplus moisture, oxygen, &c., taken in by the roots, they absorb carbon largely from the carbonic acid of the atmosphere, which becomes fixed in the vegetable as a large proportion of its matured substance. Of course the early leaves of all plants should be protected with the utmost care.

For the protection of the turnep, I have found no more efficacious means than soaking the seed in the *most offensive tanner's-oil* for 2 or 3 days previous to sowing. This saturates the seed with the repulsive taste and odor, and as the germ which first appears above ground is furnished *exclusively* from the seed, the cotyledons, which are the most exposed to the insect, are charged with a flavor every way adapted to their protection from its ravages. In addition to this great advantage, the oil is one of the most nutritious substances for the support of the young plant, and helps it forward with a rapid growth, by which it sooner gets beyond the reach of danger.

Phosphoric acid in the proportion of 1 of acid to 2 of water, forms a steep or soak which gives wonderful acceleration to the growth of plants; soak in this 20 to 50 hours. Arsenic, in the proportion of 1 to 50 of water, in which the seed should remain 12 hours, produces astonishing effects on the early growth of vegetation. The effect of this poison on the product can not be injurious, though the seed soaked should be carefully kept from all living things, and when taken from the steeping vessel immediately buried beyond reach.

After soaking, it can be prepared for sowing, by mixing with plaster, ashes, or air-slacked lime, so intimately mixed, as to obviate any inconvenience from adhesiveness of the seeds.

If the insect is found to pursue the plants afterward, they may be sprinkled with the stale liquid from a tanner's lime-pit. This is most conveniently done with a common watering-pot. If a tannery is not accessible to the farmer, he may easily prepare any desirable quantity of liquid, equally valuable, by collecting stale urine and the strongest drainings from the dung-heap, in large hogsheads, or what is better, in permanent cisterns, which should have a place in every farm-yard, adding lime in proportion to the quantity of liquid. The addition of putrid flesh, fish, &c., will add to its efficacy. A weak brine, diluted sulphuric, or nitric acids (oil of vitriol and aquafortis), may be sprinkled over the plants with success. Unleached ashes, lime, plaster, and soot, sown broad-cast

over the plants after a rain, or while the dew is on, are sometimes effectual remedies. In addition to the value of the above applications for killing the insect, they are all directly beneficial in promoting the growth of the plants to the full value of the cost of the material and labor.

Folding sheep on the ground where turneps are to be sown, is an excellent preparation. New land when it can be had, is admirably adapted for a turnep crop, as it is free from insects, and possesses an abundance of the alkalies, which are every way suited to the rapid growth of the turnep. Burning the rubbish on the land required for this crop is a good precaution, as thereby a portion of the eggs and insects are destroyed. Deep plowing will exterminate all that are placed so far beneath the surface, as to be unable to reach it again. The use of long manure, or sowing on a stubble-field, are objectionable, as they harbor and protect the insects.

Where enemies are numerous, 3 or 4 pounds of seed should be sown in drills, and twice as much more broadcast, which affords more food for the fly, and there may possibly be sufficient left for a crop, after supplying the foragers with all they want; the excess, if any, may be thinned with the cultivator and hoe. But in all cases the soil should be in good condition, and be prepared with some rich, stimulating manure, such as night-soil or other concentrated aliment, by which the plant will be enabled to push itself rapidly beyond the reach of marauders. Alternating turneps with potatoes, sugar-beet, and other crops in no way related to this family of plants (the cruciferæ), is useful, by cutting off the supply of food to its enemies, by which it is starved out or compelled to shift its quarters for subsistence.

The frequent use of the cultivator and hoe is beneficial in disturbing and destroying the insects, besides materially assisting the growth of the plant. All family weeds, colewort, water-cresses, hedge-mustard, and the like, which afford food to the common enemy, should be carefully exterminated; and such other kindred vegetables, as cabbages, cauliflower, mustard, table and horse-radish, &c., should be cultivated remote from the turnep-field, so as to afford no rendezvous for their perpetuation.

R. L. A.

For the American Agriculturist.

BENEFICIAL EFFECTS OF LIME.

Clinton, N. J., March 17th, 1843.

Mr. A. B. Allen, Dear Sir: Mr. De Russy did not exaggerate the beneficial effects of lime upon the soil here; and I can safely say that the product of the soil for a section, embracing at least one third of the county—the northern part—has been more than doubled in the last 12 or 15 years. Fifteen or twenty years ago, our farmers raised little or no wheat; rye bread was used almost exclusively in families, and rye, corn, and oats, our main dependance. Previous to that period, lime had not grown into general use; now, every farmer here limes, and with hardly an exception, every farm has its lime-kiln. At this time many farmers sow no rye at all, and those that do, sow it more for the straw than the grain, the straw being superior to wheat for feed and tying stalks when we cut up our corn.

As to your first inquiry, "the character of the soil," it is extremely diversified, and has but one general characteristic—the substratum being a yellowish clay, and stiff. The country is very uneven and hilly, indented with valleys and streams, tributary to the south branch of the Raritan. Our hills are a gravel, loose, and not unusually stony (granite). In our valleys, the limestone is found, and here the land is pretty even, and the soil to the surface a yellow clay, and tolerably stiff. We have also the gray shell, and a dark reddish soil much intermixed with round flinty stones, and the black loam common to bottom meadows; the last four are all found on my farm of 200 acres. There is very little sandy land, and it takes less permanent benefit from lime than any other kind. On all the abovementioned varieties of soil, lime is highly fertilizing, and it is difficult to say which variety is most benefited, though I think the effect upon the lime of stone lands is least apparent. Wet lands, while they remain so, can not be brought up by lime.

Our system of tillage is a constant rotation of crops. Our fields of winter grain we always put down in clover in the spring; this we mow the following year, and the next spring plant it with corn. If not sowed with winter grain, as soon as the corn is cut (a practice on the increase), it is sowed the next spring with oats or barley, and clover-seed; this the following year is pastured or suffered to grow to be turned under for wheat—open fallows are getting out of date.

The quantity of lime applied at one time varies according to the strength of the soil, from 25 to 50 bushels per acre. The best method of putting it on, is to stack it as it is taken out of the kiln in a large heap, throwing a few pails of water upon the heap occasionally as you are adding to it; in a few days after the lime will be found puffed up light, and in the proper state for spreading; if it is then put on we think it does most good. Some throw it on the top in the fall, to be plowed in next spring or summer; but the best method is to put it on after the last plowing and harrow it in—plowing buries it too deep.

For raising land to a high state of culture, our way here has been to crop pretty freely when the land is in good heart; clovering after every crop of straw, occasionally turning it under green, and often suffering it to fall and rot on the surface; this with a sprinkling of lime every two or three years, until the quantity amounts to about 80 or 100 bushels per acre, has invariably succeeded. I must not forget, however, that our farmers bestow a high value on their barnyard manure, and think it indispensable to a heavy crop of wheat.

Plaster is universally used here upon clover and corn, and the advantage of it is undoubted; whether greater or less, with or without lime, it is out of my power to determine. Ashes made in burning lime, are considered about as fertilizing as lime, bushel for bushel; but the effect of lime is far more permanent. A part of your 4th and 5th questions are yet unanswered.

We sow to the acre of wheat 1 3-4 bushels; rye about 1 1-4 bushels; oats 2 bushels; barley a little more; buckwheat, of which we raise a good deal, 2 pecks to the acre. Of the seeds, clover 1 bushel to 6 acres; timothy, 1 to about 10 acres; flaxseed, 1-2 bushel to the acre, when sowed for seed; 3-4 of a bushel when sowed for fibre.

It would be difficult to say what is the average yield of crops here; we think 30 bushels for wheat a fair yield for our best land, though for an average of years, 18 or 20 would come nearer the mark. Corn from 15 to 70 bushels shelled. Rye, of this grain we have had but one good crop in 7 or 8 years. I have had on this place, however, 300 bushels on 10 acres of land; oats 25 to 40 bushels; buckwheat varies from 10 to 40, being a very uncertain crop; flaxseed from 6 to 12 per acre; and of this almost every farmer sows a little.

I have thus in a general way replied to most of your inquiries. To go into the minutiæ of your questions would require a larger space than this sheet. I shall be happy to communicate verbally any farther information, should you think it worth your time to visit this neighborhood.

Accept my best wishes for the success of your undertaking, and apology for my tardy reply, writing being with me something of a task, and believe me, most respectfully, your obedient servant,

GEORGE W. TAYLOR.

For the American Agriculturist.

CULTIVATION AND MANUFACTURE OF MADDER.—No. 2.

Before giving directions for the manufacture of madder, as practised in Europe, I will inform our farmers of the mode pursued in Kentucky of cultivating it.

They first dig the ground to a good depth, making the mold very light and mellow; they then plant small roots in rows, and when they have thrown up stalks of about a foot in length, they bend them down, and throw over them a layer of mold; these will throw up fresh stalks which undergo the same process. This covering up is continued until the third year, when the bed is opened with a pitchfork, and all the roots large enough for use, are washed and dried under a shed. The smaller roots are planted in fresh beds. The beds must be kept clean from weeds. The stalks when laid down become roots. The roots most valuable for coloring are from the size of a small goose-quill, to that of the little finger. If much larger, the coloring matter will be of little value, and if many such are ground with the smaller roots, the whole mass will be injured.

I shall now proceed to describe the manufacture of madder roots for the market. I transcribe this account from A. Ure, on the Arts, &c., published in England last year.

"The madder, taken from the ground and picked, must be dried in order to be ground and preserved. In warm climates it is dried in the open air; but, elsewhere, stoves must be employed.

"The stringy filaments and epidermis are to be removed, called mull; as also the pith, so as to leave nothing but the ligneous fibres.

"The preparation of madders is carried on in the department of the Rhone, in the following manner:—

"The roots are dried in a stove heated by means of a furnace, from which the air is allowed to issue only at intervals, at the moment when it is judged to be saturated with moisture. The furnace flue occupies a great portion of the floor; above are three close gratings, on which the roots are distributed in layers of about eight inches. At the end of twenty-four hours, those which are on the first grated floor directly above the stove are dry, when they are taken away and replaced by those of the superior floors. This operation is repeated whenever the roots over the stove are dry. The dry roots are thrashed with a flail, passed through fanners similar to those employed for wheat, and then shaken upon a very coarse sieve. What passes through is farther winnowed and sifted through a finer sieve than the first. These operations are repeated five times, proceeding successively to sieves still finer and finer, and setting aside every time what remains on the sieve. What passes through the fifth sieve is rejected as sand and dust. After these operations, the whole fibrous matters remaining on the sieve are cleaned with common fanners, and women separate all the foreign matters which had not been removed before. For dividing the roots, afterward, into different qualities, a brass sieve is made use of, whose meshes are from 1-4 to 1-8 inches diameter. What passes through the finest is rejected; and what passes through the coarsest is regarded of the best quality. These roots thus separated, are carried into a stove, of a construction somewhat different from the first. They are spread out in layers of about four inches in thickness, on large lattice-work frames, and the drying is known to be complete, when on taking up a handful and squeezing it, the roots break easily. On quitting the stove, the madder is carried, still hot, into a machine, where it is minced small, and a sieve separates the portion of the bark reduced to powder. This operation is repeated three or four times, and then the bolter is had recourse to. What passes through the sieve, or the brass meshes of the bolter, is regarded as common madder; and what issues at the extremity of the bolter is called the flour. Lastly, the madder which passes through the bolter is ground in a mill with vertical stones, and then passed through sieves of different sizes. What remains above is always better than what goes through."

The manufacture of madder roots appears to be a very formidable operation, yet when reduced to practice, I suspect most of the difficulties so apparent in description, would vanish.

WM. PARTRIDGE.

For the American Agriculturist.

THE RHODODENDRON A GOOD THERMOMETER.

There are few shrubs in our country that have not some use, though discoverable only by the closest examination, and few persons would see, on first scrutiny, in the Rhododendron Maximum a complete thermometer. There have been for the

last five years several very large specimens of this shrub, close by our dining-room windows, and by protracted observations by various members of the family, they have been so infallible in showing the temperature of the atmosphere, that the thermometer which hung without the door, became in some measure useless, unless we wished to ascertain to a degree, the state of the air.

When the weather is cold, and the thermometer about zero, the leaves are rolled so tightly together that it seems almost impossible for them to again become unrolled, at the same time they are turned nearly black; and the expansion, as the weather moderates, is so gradual, that by the degrees of their color and shape, a person is enabled to form a pretty accurate opinion of the weather; and when mild, the leaves assume a light and very rich green.

I should think this plant might become valuable on this account to farmers and others, whose remoteness from cities and towns where thermometers may be had, prevent them from procuring them; and I believe that a winter's attention to the rhododendron will enable any one to judge of the external temperature of the atmosphere, with very considerable accuracy. At the same time, it is one of our most ornamental native shrubs, and no one can fail to admire a plant covered with its profuse mantle of roseate flowers, besprinkled through its beautiful, shining foliage; these alone impart a richness to American forests sought elsewhere in vain.

GEORGE W. FAHNESTOCK.

Pittsburg, Pa., April, 1843.

It is with great regret that we learn from the Messrs. Brentnall, that they retire from the business of breeding Berkshires. Being the first to commence, we had supposed that they would be the last to give it up; but the fact is, with the superior mild climate of the south, they can make pork there for half the price that we can here at the north; besides, for a succession of years we have been supplying them with our choicest breeds of swine, and have at length put it into their power to beat us at our own game, and breed as good animals as ourselves. We cheerfully coincide with all that the Messrs. Brentnall say of Colonel Bonner. He is one of the most spirited and judicious breeders at the south; and while upon this subject, we will now add, that Mr. R. H. Hendrickson, of Middletown, Ohio, recently sent him a young Berkshire boar, by Windsor Castle, selected in England and imported by ourselves in 1841. Col. B. has given him the name of Great Western, and we have no doubt when full grown that he will well deserve the title, and prove a tall and somewhat stout customer among the Georgians.

At the commencement of our breeding Berkshires, we were among those who purchased stock of the Messrs. Brentnall; and we have also seen it from their piggery scattered over this state. Ohio, and Kentucky, and although we since became rival breeders, we trust that we can say in this instance, as well as in every other, that it was always with the most generous and liberal views and expressions on our part. Whenever we met a good thing we said so, and that freely, no matter who bred and owned it, and we have the satisfaction of believing that our motives and feelings have generally been reciprocated. We tender to the Messrs. Brentnall our warm thanks for their kind expressions, and we can assure them, that whatever enterprises they may hereafter be engaged in, they have our best wishes of success.

For the American Agriculturist.

LAST SALE OF BERKSHIRES.

Canterbury, Orange County, N. Y., April 17th, 1843.

A. B. ALLEN, ESQ.: In the first place allow us to tender you our thanks, for the insertion in the January number of your invaluable periodical, the first premiums awarded to the Berkshires at the Planters' Club held at Sparta, Georgia, which we presume you took from the Georgia Journal which we had previously forwarded to your office. Up to that time, we had sold to Colonel John Bonner of White Plains, Green County, Georgia, seven sows and a boar, which all met with his decided approbation. We have now just sold him our whole reserved lot of Berkshires, together with our good will as breeders of the same. They consist of six sows and two boars, including the imported animals, Ontario and Lady Huttleson; the only two remaining of the last importation, sent us out by our friend Mr. Hawes. They are all fine and very superior animals, and we flatter ourselves would not suffer in comparison with any of their kind in the country.

The produce from Ontario have uniformly been vastly superior to any other pigs we ever bred, which has given him a good notoriety with the numerous customers we have supplied; he will consequently take with him a well-established reputation to his enterprising owner, and also be a great acquisition to the breeders of Berkshires in the state in which he is placed.

In transferring our breeding stock to, and retiring in favor of Colonel Bonner, we have every confidence in his judgment and abilities as a breeder, to keep up and even increase the high qualities of the animals under his supervision; and from these conclusions, we take great pleasure in most respectfully recommending his stock of Berkshire hogs to the notice of the public, and particularly to those persons who anticipated honoring us with their orders for the ensuing season. From the number and superiority of the animals sold Colonel Bonner, together with his choice selections from other celebrated piggeries, we may safely and confidentially assert, that he has in his possession some of the best blood, and very probably the most choice selection of Berkshire hogs to be found in one man's possession in the Union. In rec[illegible]

mending Colonel Bonner's fine stock to the particular attention of breeders of Berkshires, we can in all confidence assure those persons intrusting their orders to him, that they will be fully, promptly, and honorably met; and we may farther add, that in zeal and public spirit, Colonel Bonner yields the palm to no man.

We have been in the possession of the improved race of Berkshires ever since the year 1824, consequently, we believe we were the first to mount the Berkshire hobby. Whether we have ridden for good or evil to the country, we will leave it to the community to decide; but now we dismount, and with our bow and kind thanks to our numerous patrons, and our best wishes, joined by our humble endeavors for your success in the new and laudable pursuit you are engaged in, we retire from the business of breeding Berkshire pigs for sale altogether. With great regard and esteem,

A. & G. BRENTNALL.

For the American Agriculturist.

CULTURE OF SILK.

Extract of a letter from a gentleman in Massachusetts, to his correspondent in Monroe County, N. Y., who has always been faithless in the silk cause:—

After all, the poor despised mulberry may be worth something, for feeding worms, making the best of paper, and the stalks used to obtain bark silk and no mistake; so say those who have tried it. I suppose you are yet among the doubting. Astonishing as it may appear to you, some have the courage to suggest, that a field of mulberries may be cultivated at a profit exclusively for the purpose of making paper; and also, that after being stripped of the foliage, the tender stalks may be subjected to the jaws of the common brake, and procure abundance of valuable bark silk, which would make excellent Pongee, very suitable for coats, vests, handkerchiefs, pantaloons, &c.

It remains, however, to be proved, that the bark silk, from an acre of close planted mulberry, may be worth an acre of flax; and why not much more, as silk is more valuable than flax? A silk-grower in this vicinity has a pair of pantaloons made of silk spun from perforated cocoons, which he has worn two seasons, and it is apparently as durable as leather. It is thought that the bark silk may be made valuable for similar purposes. To do all this, and use up the whole mulberry plantation, requires some skill, all which is accessible. Here are three separate applications of the mulberry patch, the product of which may be worth more than can be obtained in any other crop.

A great improvement is being put in order for feeding worms. It is less expensive than the usual cocooneries, and more congenial to the wants and habits of the worm, called *open feeding*. Their treatment has been too nearly allied to the nursery system; whereas, they are the natives of the open air, and should be accustomed to all the vicissitudes of the weather. The worms would be more healthy and form better cocoons. Cocoons have been seen in their forest state in South Carolina, by a gentleman now resident in Northampton. Cocoons have also been seen in the month of July, formed on the white mulberry found in a deep ravine on the southeast side of Mount Holyoke, and near the summit. On opening the cocoons, the live chrysalis was found.

This subject, however, comes not within your medical department, but the avails, in some shape, may replenish the medicine-chest; and I hope you may live to see the time when the culture of silk may become a valuable source of revenue and saving to the country. Why should the United States expend annually some twenty millions of dollars for an article of luxury, which can as well and as cheaply be produced at home, and no longer send our money abroad to encourage the industry and enterprise of foreigners? We have the appropriate soil, climate, and cheap labor among our females, children, the aged and infirm. Why then hesitate what to do? Try the experiment.

Yours, &c., D. C.

Northampton, April 10, 1842.

A correspondent from Alabama asks: "Can you not draw out from some one of your contributors something on plows, harrows, and cultivators? I mean the principle of construction, for there are very few persons who know anything about it. I asked a planter the other day if he made his own plows."

"'Yes.'

"'By what rule do you stock them?'

"'No rule—I just put them together by my *eye*.'

"This was enough to convince me that he cared but little for a mule's shoulders, and his comfort in pulling."

An excellent article will be found on the subject of southern plows, by Mr. Cornell, page 49 of May No. of this paper.

In order to see how it looks, we have taken the liberty of inserting the pedigree of Col. Sherwood's bull, according to the method suggested by us page 73, Vol. I., of American Agriculturist, which we think much more simple than the one adopted in the English Herd Book. It is perfectly preposterous to repeat the G's so often; they *convey no idea* till counted, and it always gives us a sick headache to do this. Beside, the old method can not be followed much longer. Let any one think of a herd-book a century, or even half a century hence with the pedigrees recorded in the usual way, and he will find that the G's will occupy three fourths of the book, and the volumes by that time make a small cart-load. A reform must be made, and the sooner we hit upon a more simple method of record the better. This is our suggestion, and if any one can propose something more appropriate, we shall be glad to hear from him. We took the same

liberty in our May No., when we inserted the pedigree of Mr. Bates' bull, Duke of Northumberland, of England, and we trust that Col. Sherwood will pardon us for doing the same with Archer. For some account of a visit made to this stock see Vol. I. page 303 of this paper.

As to a monthly republication, selected from foreign agricultural periodicals, we should be glad to undertake it if we could have sufficient encouragement to do so; but it would not pay at present; the times are too hard, and the public too indifferent to solid agricultural reading-matter.

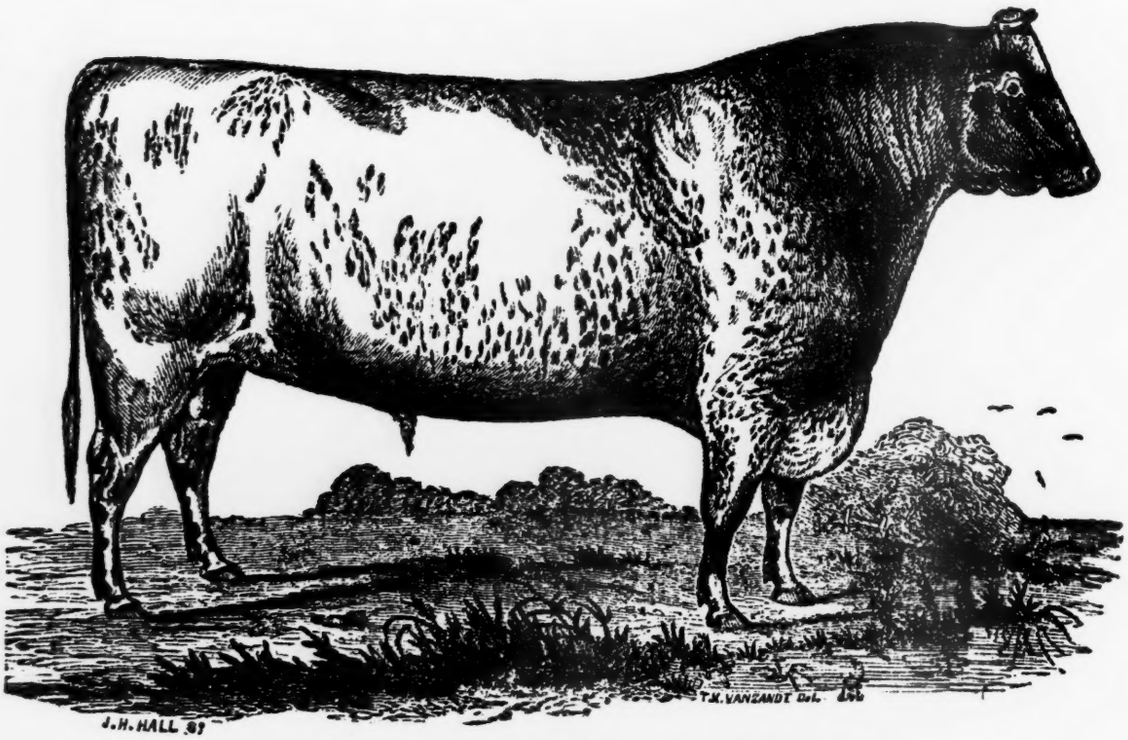
For the American Agriculturist.

WINTERING DURHAM CATTLE.

Auburn, April 27th, 1843.

A. B. Allen, Esq., Sir: I herewith send you a cut of my bull Archer and his pedigree, for insertion in your paper.

Durham Bull, Archer.—(Fig. 19.)



The property of Col. J. M. Sherwood, of Auburn, N. Y.

Pedigree.—Archer got by Rolla, dam Adeliza, by Frederick (1060); d. 2, Adelia, by Orpheus (473); d. 3, Alfrida, by Alfred (23); d. 4, Strawberry, by Windsor (698); d. 5, Old Daisy, by Favorite (252); d. 6, ——— by Punch (531); d. 7, ——— by Hubback (319).

Rolla, got by Patriot (2,412), dam Romp, by Admiral (1608); d. 2, Moss Rose, by Young Denton (963); d. 3, Rosa, by Young Denton (963); d. 4, Ruby, by Denton (198); d. 5, Old Red Rose, by Trunnell (659).

Archer proves himself a fine sire. Since you were with me, Stella and Lily have both calved with heifers, and they are superior to anything I ever saw. Lily's calf by May Duke you know was an improvement upon Lily, but her new heifer calf Lois goes far beyond her. Stella's calf is the best she ever had.

When you were with me, I was feeding straw and corn-stalks. I continued that feed until 1st February, when having fed all my straw and stalks, I commenced on hay; but I would have been perfectly satisfied to have continued to feed straw and stalks until this time, as my cattle were in good condition when these were out. I am confident that this feed would have kept them in the same condition all winter. Two heifers you remember were in the yard, and they have continued there up to this time. Since I have done feeding straw and stalks, they have not had anything to eat, except such litter as has been thrown out of my stable from under the cattle. I found after a while this was keeping them better than I wished, and I then directed that they should not have any more litter placed where they could get at it, and now they live on the twigs of my apple-tree trimmings. My native cows I have fed better than my Durhams, but they are not in as good condition. I have kept Durhams two winters, side by side with the native cattle, and I am confident that I can keep three Durhams to two natives of the same size.

By the way, I had almost forgot to say, that I have two heifers got by Archer on a native cow, with a sprinkle of Devon and Durham in her, which much resemble Ayrshires. From this I am convinced, that with proper selections of a Durham bull and native cows, we can produce a breed equal to the Ayrshires.

Could not a monthly publication be sustained that should be made up from the foreign periodicals? There are many things in these publications that would be valuable to us in this country, and much is of no use now. If a proper selection could be made, I for one should like it. I am, very respectfully, &c.,

J. M. SHERWOOD.

For the American Agriculturist.

CULTIVATION OF COTTON.—No. 2.

Log Hall, Miss., April, 1843.

I generally finish gathering my crop about Christmas in each year; the past season later by some 15 days, attributable more to plowing and sowing grain, than to the crop, although I sent off 8 bales to the hand; and made corn, provender, &c. in a large abundance. This plan I shall continue to pursue, as the pasturing down the grain is a saving of dry food; as much work also can be done as in the spring, when other operations demand every effective laborer, as well as making a better crop of grain, and having that much work done. I will therefore take you to the first day of January, when I may say the crop is commenced.

In the first place, I repair all fencing, after which the men are employed in cutting up and rolling logs; the women and children in knocking down cotton stalks when not too large with a stick, cutting up corn-stalks, firing log heaps, burning chunks and the brush that may have fallen from trees, cleaning up hollows, &c. At the same time, I keep as many plows running as is convenient when the earth is in proper condition. By keeping busy at this season of the year, it gives me such a control of the crop, that I can have time to do what is done effectually, which is one half the battle. If the season be favorable, I commence plowing for the cotton crop about the last week in February or the first in March, having flushed all stubble land as early as possible.

If the land was in corn or cotton the previous year, I run off the rows in the old water furrow with a short plow, this year using two horses to it, and running deep. With a turning plow I then throw to this two furrows, one from each side, intending to reverse the last beds. I use the Peacock and Dudley plows, the first a cast mould-board and wrought share, the other, both wrought in one piece.

I leave the ground in this condition until a day or two before I wish to plant, and then break out the entire surface between the rows, the baulk; my reason for so doing is, that the cotton plant grows off faster on a bed of some firmness, the radicle or future root will die oftener on a light surface than when on hard earth, if not so hard it can not penetrate; and by breaking out the middle late, it leaves the bed fresh, except a narrow strip on the top, which is cleaned off by planting, which gives the plant an even start with grass and weeds.

COTTON PLANT.—(FIG. 20.)

I begin to plant the first fine weather after the 20th of March, though usually not before early in April, some of my neighbors even earlier than the 20th some seasons; I prefer to be a few days later and have all business well up, than to haste in planting, and probably get a bad stand from cold, and part of the plowing to be jumped over.

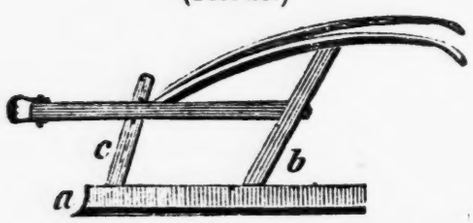
I direct the cotton-seed to be hauled out, and dropped in two or three heap-rows across the rows, at convenient distances, and in sufficient parcels; practice gives the hands a pretty correct idea how much is required. I usually measure enough for the first row, or an acre, seldom planting over 2 bushels myself, and often not over one, especially if bought seed. If the first furrows have been settled by heavy rains, are rough, or have many cotton-stalks on the row, an iron tooth harrow should be run over them, drawn by one horse, and with the row; this cleans off the row, and leaves it in fine condition for planting.

I strike out the furrow for planting with an opener. For the better understanding of the reader I will describe this.

Take a piece of timber 3 feet long, 3 inches square; round the lower side; fasten by a mortice and tennon to the bottom of chip *b* of shovel-plow, about midway of this piece;

near the front end, let in a piece 2 1-2 by 1 inch (*c*) long enough to pass through the beam, and have holes in it and one in the beam, so as to raise or drop the lower piece; the front end of the lower piece (*a*) has a shovel of some size, but to project below about half an inch.

(Fig. 21.)



Cotton-Furrow Opener.

I am very particular to open the furrows as straight as possible; if on level land, or a regular curve; if on hilly, or rolling land. The sower now follows with seed in an apron, and scatters them along in the narrow furrow by shaking the hand, so as to cause each seed to fall separate if possible. This furrow being from 1-2 to 3-4 of an inch deep, can not be covered deep, which would be an injury, seed coming up with more certainty if lightly covered. The nature of the seed requiring the leaves, which are folded or rolled up with the radicle or root in the centre, to rise up before the plume or future stalk can start. The bean will serve to explain somewhat, as it is more generally known, the radicle or root of it plunges down into the earth, while the two cotyledons or the halves of the bean, rise with the plume or future stem between them, though the plume of the bean does sometimes rise when the cotyledons do not, nor can they, from being too deep, or the earth too hard, which never takes place with the cotton-plant.

The *coverer* I use, is therefore made to suit the object in view, as follows: Take a piece of oak timber 18 inches long, 6 wide, and 2 to 2 1-2 inches thick; one edge to be slightly concave, the other rounded off, so as to present this appearance.

(Fig. 22.)

Cotton Seed Cover.

I then get the centre from end to end, and from it slope gradually to each end, leaving the ends half an inch thick or less; this is the front of it.

I fasten it with a bolt to the chip of a shovel-plow, cutting out of the back of it enough to permit the bolt to be fastened by a nut, as also to make it lighter. The object of rounding the top is, to lessen the weight, as also the quantity of earth it would carry. It is made with two sloping surfaces in front, so as to sweep off more earth; and is hollowed out on the lower edge so as to leave the bed slightly rounded to carry off the water.

I prefer planting about one half the cotton crop about ten days before the remainder, that too much necessary work will not be required at the same time; if a rainy spell of weather now, or any other backset should cause detention in working over the first time, grass and weeds will have taken such hold, that the farmer will find as hard work as in fighting fire; but if only the one half be planted first, the last half will not be pressing. I plant upland at 4 feet apart between the rows; 2d low ground at 5 feet distance. Any farmer will find there is very much to be gained by putting his land in fine order before he plants; even if a few days later planting than his careless neighbor, he will soon overtake him in cleaning his crop, besides his crop is not checked in growth; and he would do well to so pitch his crop, that his corn could get one working, before his cotton would require it.

Before giving you the cultivation of the plant, I will describe the seed that I have found to be the best, not only in producing, but in gathering the largest weights per hand. The seed is covered with a short, perfectly white furze, called Mexican, when fresh it is small, but after being cultivated in the United States it becomes longer, gradually losing the white fibres, or changing to a germe. The Pettit gulf seed is the same, only it is carefully selected and kept pure, by the planters in the vicinity of the gulf hills near Rodney—this part of the Mississippi river being called Pettit gulf. This cotton not only produces more, but the bowls (that contain the cotton and seed) open out wider, and it is therefore easier gathered and picked.

Many persons, in circling their hilly land, do it a greater injury than in plowing up and down the hills, because their furrows being inclined, the water has only a longer distance to flow, thus accumulating in quantity, velocity, and force; whereas, if they were correctly run off, the water should lie in the furrow as on level land. In doing this, the curve should be as regular as the nature of the land will permit, for the purpose of admitting the plows to be run close up to the plant, which could not be, if in a zigzag course.

If the cotton-seed be moistened and rolled with ashes and earth, so that the lint or furze be compressed, the moisture of the earth being thus brought directly in contact with the hull or seed, it will vegetate earlier, and will require less seed per acre.

I throw up my cotton bed as flat as I can to break out deep, and leave the water furrow well open, thus permitting the superfluous water to steep from the bed, and the earth to become warmer, this being necessary to the quick growth of the plant. I have now given you a minute detail of the planting, not more so than is necessary to the tyro; my next will be working the plant.

M. W. Philips.

We have never known, personally, a free martin to breed, but have heard in an indirect way of their doing so in two instances. If any of our correspondents have more knowledge than ourselves upon this subject, the facts would be interesting, and we should feel obliged for an account of the same.

For the American Agriculturist.

FREE MARTINS.

Mr. Allen: I have often heard it stated as a fact, that in cases of twins, the one a heifer and the other a bull, the heifer is always *barren*. Will you be good enough to tell us, in a short way, what you know about the matter? It surely is a curious thing, should it be so universally; that it is so in very many, if not most cases, I have not a doubt. I have inquired among my neighbors, and find some believe, and some doubt the story; but in no instance have I met with a case where the *twin heifer of a bull has failed to be barren.*

John Titsworth.

Sussex Co., N. J., April 24th, 1843.

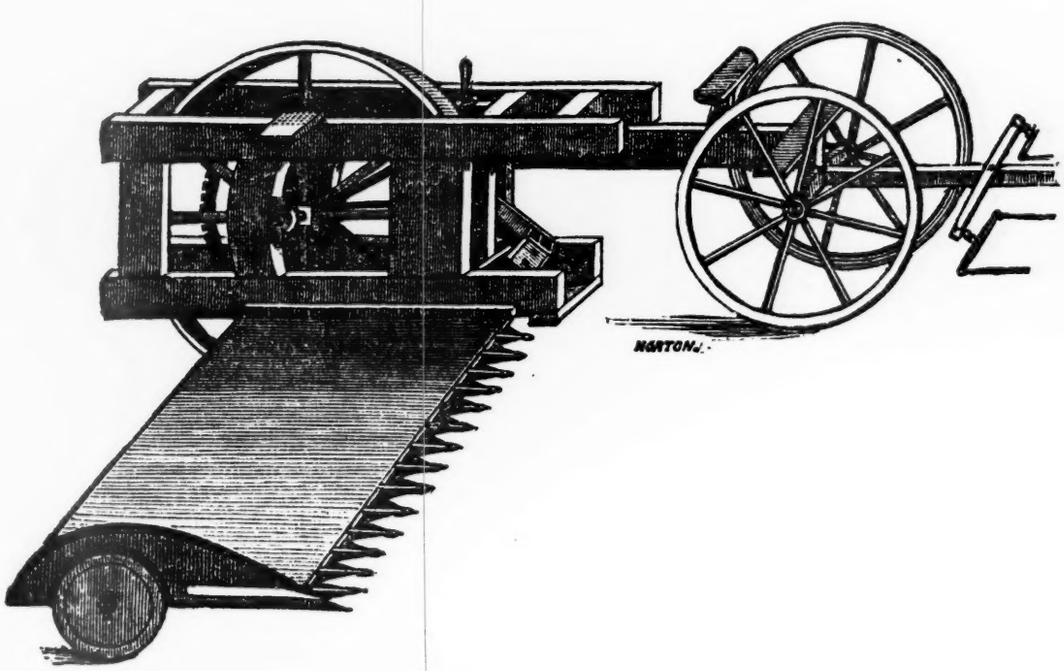
For the American Agriculturist.

HUSSEY'S REAPING-MACHINE.

Agreeably to an intimation expressed in your March number, I send you a description with a cut of my reaping-machine, and presume that this will be sufficient to give the reader an idea of its construction and operation.

When it is in operation in the field, the horses travel on the stubble, and near the standing grain, drawing the machine behind them. That part which cuts the grain is a wide platform, and extends six feet to the right hand into the grain, and is capable of being adjusted as high or as low as grain is usually cut; say from five to fifteen inches from the ground. Along the forward edge of the platform where the grain is cut, is a row of strong iron spikes about the size of small harrow-teeth. These spikes are formed of two pieces of iron, one above and one below, leaving a horizontal slit in each spike for the cutting-blades to play in. These blades are formed like lancet-points, being sharp on both edges, and several inches long. They are fastened side by side on an iron rod, as many blades as there are spikes on the platform; the iron rod with the blades upon it extends through all the spikes, and is connected to a crank immediately behind the horses. This crank is turned by cog-wheels, connected with the main axle, and is moved fast or slow according to the speed of the horses, giving a horizontal, vibratory motion to the blades, causing them to move out of one spike into another, backward and forward, there being as

Reaping-Machine.—(Fig. 23.)



Invented by Obed Hussey, Baltimore, Md.

many blades as spikes. As the machine is drawn ahead in the grain, the stalks or straw is received between the spikes, while the vibrating blades cut it off as it enters; the straw being held by the spike both above and below the edge of the blade, while the blade passes into the spike—thus the cutting is made sure.

As the grain is cut, it falls back on to the platform. When the wheat is tangled, this falling back is aided by an instrument in the hands of a man who rides on the machine, whose business is to push off the grain in heaps as it accumulates on the platform. He is able to do this with great accuracy and neatness, leaving the heaps distinct from each other, and in fine order for the binders.

One machine will cut twenty acres per day with ease, if ordinary diligence is used. The blades need no sharpening from beginning to end of harvest. Standing and tangled grain is cut perfectly clean; indeed, lodged wheat is cut better with the

machine, than it is usually cut by the cradle, and if the lodged wheat be very heavy, it will be cut very clean, and nearly as fast as if standing. Ample proof of these facts can be had from at least five hundred of the first farmers in the United States.

The price of a machine with shafts for a single horse behind, is $150. The forward wheels as represented in the engraving, will be an extra charge of twenty dollars.

OBED HUSSEY.

Baltimore, April 11th, 1843.

We publish with pleasure the following communication on agricultural schools. We have had within the past three months, repeated inquiries from parents in this city, wishing to know if there were any institution where their sons could be placed to acquire a practical and theoretical knowledge of agriculture. They desired to have their children so near that they could easily visit them, as they would take great interest in their progress, as also in the agricultural operations of the institution. We are perfectly confident, that any person willing and competent to manage a school of this kind, if he would establish it near this city, would immediately obtain as many pupils as he might wish. The neighborhood of New York possesses superior advantages for a school of this kind, and we would earnestly recommend the subject to the consideration of our citizens. Mr. Bement has recently joined the New York Central Farmer. We welcome him to the editorial corps, satisfied that his ability as a writer, and practical experience as a farmer, will make him a valuable co-laborer in the great cause.

For the American Agriculturist.

AGRICULTURAL INSTITUTIONS.

I have long been impressed with the necessity and importance of an agricultural institution for the education of young men in the theory and practice of farming. Every revolving year only tends to strengthen my conviction. From the numerous applications made annually, not only by parents who wish to place their sons under the care and guidance of good farmers, but by young men themselves, who look to commerce, manufactures, and the learned professions with a sorry prospect, and have finally come to the conclusion, that after all, farming is as *honorable*, *respectable*, and possibly in the main, as *profitable* as any other profession, and they are very anxious to place themselves in a situation to obtain the desired information.

I have long admired the model farm of the celebrated Fellenburg of Hofwyl, in Switzerland, and think one such establishment in this state would be of immense importance, ay, of much more importance than some of our colleges. An American, travelling in Europe a few years since, paid a visit to this establishment, was highly delighted, and much surprised to find a student there from the city of New York, who informed him there were several other boys in the school from the same place. "There were pupils on the ground," he adds, "from Germany, France, Spain, Portugal, North and South America, and Tifflis." It has furnished to continental Europe the best modes of its agriculture, while it has sent forth into the above-named countries, some of the most useful, virtuous, and enlightened citizens.

"When," said the lamented Buel, "shall we become wise, and imitate the good, as we are ever ready to do the bad examples of our European ancestry? Where shall we establish schools of scientific and practical agriculture for our sons? Whenever their importance shall be duly appreciated, and our citizens consult their true interests in endeavoring to promote the best interests of their country."

It is difficult to estimate the advantages that might justly be expected from such an institution, in which theory and practice would go hand in hand; where the mental, as well as physical powers were justly cultivated.

An improvement is the great object in every science; the ingenuity of man is constantly at work in order to find out by experiment some new invention better calculated to produce the desired effect; in this way the great and important improvements in mechanics have been accomplished.

Agriculture may be practised without any knowledge of its theory, that is, established practices may be imitated; but in this case it must ever remain stationary. The great proportion of our farmers jog along as if there were no improvement necessary; adhering to the old practices and beaten path of their fathers, grandfathers, and great-grandfathers, before them.

The mere routine practitioner can not advance beyond the limits of his own particular experience, and can neither derive instruction from such accidents as are favorable to his object, nor guard against the recurrence of such as are unfavorable. He can have no resource for unseen events but ordinary expedients, while the man of science resorts to general principles, refers events to their true causes, and adapts his measures to meet every emergency.

Within the last twenty-five or thirty years, there has been a decided improvement in the cultivation of the soil, still there is much yet to learn. The object of the art of agriculture is, to increase the quantity, and improve the quality of such vegetable and animal productions of the earth, as are used by civilized man; and the object of the agriculturist is to do this with the least expense, or, in other words, with profit.

I feel convinced that the establishment of a farm for the purpose of educating young men, and imparting that knowledge, which is necessary, in order to farm on scientific principles, and to good purpose, would confer a great boon to the country, and materially promote our agricultural prosperity. I would consider it to be the first and main object of such an establishment, to make the pupil thoroughly acquainted with, and understand the prin-

ciples of the science in which he is about to engage; I call it a science, for, to be a *good farmer* requires more scientific knowledge than is generally admitted. Some imagine that farming is so simple a matter, that the *veriest dolt* might be a good farmer; this is erroneous. To be sure, they could give orders to plow, and sow, and reap, and follow other people's examples in the general government; but to be a *good* and *successful* farmer something more is needed.

I have been induced to make the foregoing observations in consequence of having several applications to take young men, and instruct them in farming. I have refused to take them, 1st, on account of my inability to teach them, and 2d, on account of the difficulty which generally arises from jealousy of the common laborers on the farm. They are very apt to imagine more favors are shown, and they receive better fare, &c. Besides, it is no object for a farmer to take one young man for merely the labor he would perform; for it can not be expected that he could take hold at once, and earn even his board. They must be brought on by degrees. I am well convinced that if some competent farmer would undertake the management and instruction (in practice as well as in theory) of a certain number of young men at a reasonable charge per annum, he would make it profitable to himself, and advantageous to his pupils.

In the absence of such an establishment in this state, I most cheerfully recommend the "Eden-Hill Farm Institute," on the river Delaware, 12 miles above Philadelphia. Mr. James Pedder, the able editor of the "Farmer's Cabinet," who is well qualified, has connected himself with J. Coperthwaite, Esq., the owner of the farm, which, "in every respect is well adapted to the purpose, has established an institution for the reception and instruction of young men, in the principles and practice of agriculture and horticulture. He will occupy the elegant mansion, which for healthfulness and beauty of situation can not be surpassed; and it will be the study of himself and family to tender to their young friends the convenience and comfort of a HOME.

"The exercises of the institution will embrace the practice of agriculture in all its various branches and details; the cultivation of the best crops, and the rearing of the choicest stock; the best animals having been selected, and the most improved implements obtained. The management of the plow will form a leading feature in the course of instruction; subsoiling will be adopted on a regular scale, as well as a system of draining, the formation and application of composts, &c., &c. Horticulture will occupy a large space of attention, the students having the advantage of studying and practising this branch, the care of which will be under a professed gardener, having the charge of a range of houses, with an enclosed garden of more than two acres in extent."

I will also take this opportunity to inform the readers of this journal, that an "Agricultural School" has been lately opened in Tennessee, at "Elm Crag," by T. Fanning, the able and talented editor of the "Agriculturist." The school was opened on the 2d of January last, with six students, and I am now advised that there are eleven young gentlemen in the establishment, and preparations are making to take a few more this spring. In addition to the different operations incident to husbandry, gardening, &c., their studies will embrace spelling, reading, writing, arithmetic, English grammar, geography, algebra, geometry, and other mathematical studies, and everything necessary to an English classical education, together with some of the most important sciences, such as botany, geology, chemistry, cultivation, &c. Sacred history and music are also studied.

C. N. BEMENT.

Three Hills Farm, April, 1843.

Accompanying Dr. Philips's last article on cotton, he says in a private letter:—

"I have gathered here 2,500 pounds of cotton on strong cane-land, and from a single acre 1,700 pounds, the year it was cleared. But is 5,989 pounds of cotton a greater product than 100 to 190 bushels of corn? All appear incredible to one who has no experience. Many say the product of cotton can not be increased. Why not? Can we not increase the product of all grain, roots, &c.? of beef, pork, mutton, and wool? I have gathered myself, from a single stalk 50 to 60, and even 100 open bowls, or the cotton from them, to speak strictly. Now suppose a crop could average this. My rows were 5 feet apart; admit the stalks were 3 feet, there being 2,904 stalks, we would have 2,500 pounds or about, or even more; as much of the weight depends on size of bowls. I heard a gentleman of my acquaintance say, he had counted of bowls and forms about 500 *I think*. Suppose the stalk could be nourished to bear these to maturity, we should then have at even 5 feet apart each way, 1,742 stalks, and full 8,000 pounds of cotton. There is one fact as mentioned by a friend of mine on the Mississippi river, General Hugh W. Dunlap, that he gathered (I think) 7 *pounds from one stalk!* Could any mode of cultivation bring a field to this return, we could afford to plant cotton 7 feet 6, by 4 feet, which gives 1,452 stalks on hills, and a product of 10,000 pounds. But this will not be done soon; though I have said for months before Dr. Cloud's article came out, that as the science of farming spreads, it will give, to even us cotton-planters, results as astonishing as any yet developed. A hog weighing 600 to 700 pounds, would have been a fortune to a man 20 years since in the United States. Many even now laugh with incredulity at the idea of making 120 to 130 bushels of corn per acre. Suppose a man had stated he had done so in 1820 to '24, his friends would have blushed for his veracity, or rather want of it. One must not run off at any big tale, but pursue his usual course; at the same time let us not shut our eyes to the light, try experiments on so small a scale that we can not be injured, and then having "proved all things, hold fast to that which is good."

There are large tracts of meadows in New Jersey opposite to this city, ditched and embanked as

Mr. McCaughan proposes to do those on the Biloxi bay. But the best, and indeed the only way to accomplish this, has been with the shovel and spade. No machine has yet been invented that could do the work as cheaply or as well as by hand labor; nor have we ever heard of anything in Europe. The steam-plow in England did not work well, and it cost more to turn the land with it, than by the usual method of plowing with horses or cattle. If there be a machine of recent invention, calculated to assist in ditching or embanking, and any of our readers can give us the information where it is to be found, we shall feel quite obliged by the intelligence.

For the American Agriculturist.

DITCHING AND EMBANKING MARSH-LANDS.

Mississippi City, March 28th, 1843.

Mr. A. B. Allen, Dear Sir: I am about beginning to ditch and embank 300 to 500 acres of beautiful salt marsh. It is just level with ordinary tides, at the head of Biloxi bay, and I shall have a levee 6 feet high, 20 feet base, and 9 feet wide on top to secure it from being broken in our severest storms. Seven hundred rods of levee will enclose 500 acres. It lies 15 miles from the mouth of the bay, and at the mouth of a small fresh water river, and is covered with a rich coat of native grass. I do not think it has salt enough in it to hurt it. We have no experience about the value of such lands, and I have but little idea of what will be their product when prepared for cultivation; they are the lands Dr. Cartwright thinks would be so valuable stocked in the Herba Spagna of Italy. I would now be willing to give 200 acres of the land to have it all leveed and ditched, which I think can be done for $1,500 at farthest. If you can give me any information on this particular subject, I will esteem it a very special favor; also the cost of a steam-plow on a small scale, as this is the land such a plow would be best adapted to. Is there such a thing as a steam-machine for ditching and embanking? This marsh being perfectly level, smooth, and free from roots, it must be well adapted to the use of such machinery. Yours truly,

John J. McCaughan.

For the American Agriculturist.

ICE-CREAM.

To two quarts of milk, add three beaten eggs, stir them together, and place over a fire till brought by stirring and a gentle heat to the consistence of cream. When warm, add a table-spoonful of diluted arrow-root or starch; then sweeten and flavor to your taste with lemon, peach-leaves, or vanilla, and set by to cool. When cold, pour the cream into a small pail, which insert in a larger one, well covered on the bottom with ice, and sprinkled with salt. Put ice in the space between the pails, and add salt to it as before. As the mixture freezes, stir it occasionally, till all is equally frozen. The above is improved by using half cream. If you flavor with peach-leaves or cinnamon, put them over to warm (not boil) with the milk, and then strain before adding the sugar. The ice must be put into the form after it is thoroughly congealed.

A Lady.

For the American Agriculturist.

WISKONSAN AND ITS PRODUCTS.

Manitou-woc, Wiskonsan Ter., April, 1843.

A. B. Allen, Esq., Sir:—

Having had the pleasure of seeing some of the numbers of your Agricultural paper in this region, and thinking a short notice of some things here might be interesting to a portion of your readers, I shall venture to trouble you with a short epistle. The name of my present resting place, above, may seem strange to many of your readers, but not stranger than the Pequot, Mohegan, and Narragansett, of the northeast, and Choctaw and Chickasaw of the southwest. The definition, like most of the Indian names, is full of significance and beauty; *Manitou* meaning their great Spirit, and *woc* his place or dwelling.

But where is it, is the next inquiry? It is somewhat diffusely located, it being the name of a river, county, harbor, and county seat; but all lying between two lovely sheets of water, Lake Winnebago on the west, and Michigan on the east. The country is delightfully situated, having a surface gently undulating, with hill and dale, and streams as pure, as well out of the granite hills of the north. This is the country of woodland and forest, yielding some of the finest timber, in great abundance. The prairies commence about 35 miles west of the lake shore in this latitude, and thence extend, with slight interruptions, I believe to the Rocky Mountains. The principal growth is Sugar Maple, Beech, Pine, and Oak intermixed. I have seen the most beautiful and extensive orchards of the first, stretching for miles over a clear grass sod, which would laugh to scorn all the feeble embellishments of art, around which were located, at convenient distances, the wigwams of the red man. These, during the sugar season, are always occupied by their owners, for the purpose of securing their annual supply of sugar.

In the spring of 1836, I was threading my way through this, at that time, *totally unoccupied* country, taking the route from Milwaukie to Green Bay, on horseback, in company with a western missionary, and a *half breed* mail-carrier as our guide. After camping out in the woods the first night of our journey, we came upon an extensive sugar ground towards evening, having passed several during the day, and making our way near the centre of it, we espied two large, snug, well-constructed wigwams, where we concluded to put up for the night. We unhorsed, tethered our beasts, and at the request of the inmates, went in and prepared for our lodging. We found large rooms, piled up with the crystallized juice on two or three sides, part of it in large cakes, and another portion handsomely grained in large birch-bark *mo-koks* (if our orthography does not suit our occidentalist readers, they have my full permission to improve it), weighing from 25 to 40 lbs, each. Such a sugary I never before witnessed; and it was all accomplished by an old man, some 90 years of age, three or four well-favored, neat, comely-looking squaws, and the children. It was the season of trapping, too, and the men could not forego their harvest of peltry, and left this duty to be performed by those who could not be of service elsewhere. What added to their difficulties, was the total destitution of food, except what was afforded by the sugar, some wild

roots, and an occasional wild duck, which the boys contrived now and then to secure, by the aid of their bows and arrows. I had an excess of provisions, and took out a large flat loaf of hard, unleavened bread, which I offered one group. Their eyes sparkled with delight, and at once the matron took a large knife, and divided it into as many *equal size* pieces as the number composing the circle, and to each she gave alike, the tottling papoose having as much as the matron herself —all of which was eagerly and ravenously devoured. Their gratitude for this small favor seemed to know no bounds; and they pressed on me cake after cake of sugar, and I verily believe, had I a wagon, I could have loaded it in return for my petty gift, which I added to subsequently by giving them all I could spare. But I was no "trader," and I forebore. Is it strange that our crafty, griping whites get rich out of the unstinted generosity of the red man? Verily "they shall rise up in judgment against this generation."

This was one of the pleasantest nights of my life; the novel, wild, picturesque, and beautiful seemed before me; the profusion of this luscious store, with all its appliances of boiling kettles, suspended over a large fire by a pole, supported by crotches, and running lengthwise of the cabin; the large, canoe-like trough, extending through the walls, with one end near the kettles, to contain the sap; the well-ordered apartments; the industry, intelligence, and kindness of the inmates; the historical reminiscences of the old man, who witnessed, while a stripling, and yet distinctly recollected, the chivalrous battle on the Heights of Abraham, 80 years ago, between those model champions, Wolfe and Montcalm; his tender age, like that of young Norval, inducing his father "to keep his only son, himself," from the tented field, though yet near enough to see and be interested in the bloody fray; a young urchin displaying much of the genius of an artist on the doors and walls adorned by his rustic, untaught sketches; and the robust forms, and open, intelligent countenances of all; these, and my reflections, stretching through the uncertain past, and probable future history of this proud, yet pitiable race, gave an intensity of interest to the scene, I shall never, never forget. But I am wandering.

The pines grow singularly in this country, pushing their straight trunks upward for 150 feet in height, by the side of the sugar maple and beech, which, at the east, choose very different soils. The soil is generally very good, though somewhat varying with the hills and valleys. The richest, deepest upland soil I ever saw, is on the Stockbridge and Brothertown reservation, on the head waters of the Manitouwoc, which was selected with a great deal of judgment, and after much examination, by some of the most intelligent Indians, and their friendly white superintendants. These Indians form an extensive settlement, of intelligent, moral, and perfectly reclaimed natives; the gathered fragments of many an extinct tribe from New England, whose ancestors once waged exterminating wars against each other, but whose descendants now are like a band of brothers, pursuing the peaceful paths of civilized life. I will add, for the honor of our Government, that they are in the full enjoyment of all the rights of American citizens.

The valley which opens at the county seat, Manitouwoc rapids, three miles from the harbor on Lake Michigan, though not extensive, is as fertile as any portion of the famed valley of the Genesee. Every crop which is cultivated there, thrives here in great luxuriance; and I have nowhere seen better returns for seed and cultivation than are furnished here. There is a good deal of enterprise among the settlers here and the vicinity, many of them having paid considerable attention to the improvement of their stock, Berkshires and Shorthorns already having become citizens of this region. Although the earliest settlements were not made here till 1836, there is already a goodly population; the county, notwithstanding its small dimensions, containing about 1000 inhabitants. Population is pushing its way into this territory rapidly, owing to the agreeable diversity of the surface, the purity of the waters, the salubrity of the climate, the richness of the soil, and the varied advantages of location. It has Lake Michigan on one side, and the Mississippi on the other, connected by a line of scarcely separated water communication, through the Wiskonsan and Fox rivers, to Lake Winnebago. This lake is within two miles of the river Manitouwoc, which empties into it. Steamboats from Buffalo pass its mouth daily during the season of business.

In addition to all the foregoing advantages, there are in the western and central portions of the Territory, rich and extensive beds of lead and copper, which probably extend eastward to the Lake. These are some of the inducements which point out this Territory, and especially the eastern portion of it, as full of promise to the hardy, industrious, and intelligent emigrant. The force of these advantages is seen in the press of settlers, who seem to be hurrying into this El Dorado, to secure their section or quarter section for themselves and their posterity.

I trust your exertions will not be wanting to induce more of these settlers to take good agricultural works of the day, that they may not fall behind in the intelligence which is, by these means, making such inroads upon the imperfect systems of farming which are still too much practised here, as well as elsewhere. I may write you again hereafter, from this enchanting country. Very respectfully, yours, VIATOR.

CATTLE SHOW AND FAIR

Of the New York State Agricultural Society, to be held at Rochester, September 19, 20, and 21.

List of Premiums for 1843.

ON CATTLE.

I. BULLS—*Three years old, and over.*

For the best,	$20	For the third best,	$8
For the second best,	12	For the fourth best,	

Copy of the N. Y. S. Ag. Soc. 'Transactions.'

II. BULLS—*Two years old and under three.*

For the best,	$15	For the third best,	$5
For the second best,	10	For the fourth best,	

Volume of 'Transactions.'

III. BULLS—*One year old and under two.*

For the best,	$15	For the third best,	$4
For the second best,	10	For the fourth best,	

Volume of 'Transactions.'

IV. BULL CALVES.

For the best,	$10	For the third best,	$4
For the second best,	6	For the fourth best,	

Volume of 'Transactions.'

V. COWS—*Three years old and over.*

For the best,	$20	For the third best,	$8
For the second best,	15	For the fourth best,	

Volume of 'Transactions.'

VI. HEIFERS—*Two years old and under three.*

For the best,	$12	For the third best,	$5
For the second best,	8	For the fourth best,	

Volume of 'Transactions.'

VII. HEIFERS—*One year old and under two.*

For the best,	$10	For the third best,	
For the second best,	5	Volume of 'Transactions.'	

VIII. HEIFER CALVES.

For the best,	$8	For the third best,	
For the second best,	5	Volume of 'Transactions.'	

IX. COWS—*Cross between the native and improved breeds.*

For the best,	$12	For the third best,	$6
For the second best,	9	For the fourth best,	
Volume of 'Transactions.'			

X. HEIFERS—*Cross between native and improved breeds, between two and three years old.*

For the best,	$10	For the third best,	$5
For the second best,	7	For the fourth best,	
Volume of 'Transactions.'			

XI. HEIFERS—*Cross between the native and improved breeds, over one and under two years old.*

For the best,	$10	For third best,	
For the second best,	5	Volume of 'Transactions.'	

XII. COWS—*Native breed (not having any imported blood).*

For the best,	$10	For the third best,	$5
For the second best,	8	For the fourth best,	
Volume of 'Transactions.'			

XIII. HEIFERS—*Native breeds, between two and three years old.*

For the best,	$10	For third best,	
For the second best,	5	Volume of 'Transactions.'	

XIV. DAIRY COWS—*Of any breed.*

For the best dairy cow, from which shall have been produced in thirty successive days, the greatest quantity of butter, quality as well as quantity considered—which shall be exhibited at the time,

$15	For the third best,	$5	
For the second best,	10	For the fourth best,	
Volume of 'Transactions.'			

No premium will be awarded unless an accurate statement of the manner of feeding the cow, management of the milk, and method of making the butter, the time it was made, the breed of the cow, if known, the time after calving; the cow as well as the butter to be exhibited at the time, with certificates from the person or persons who milked, and managed the cream, and churned the butter.

WORKING OXEN—*Over four years old.*

For the best pair,	$15	For the third best,	$5
For the second best,	10	For the fourth best,	
Volume of 'Transactions.'			

STEERS—*Three years old.*

For the best pair,	$10	For the third best,	
For the second best,	5	Volume of 'Transactions.'	

In awarding these premiums, particular reference will be had to the close matching, excellent training, and docility of the animals, as well as their general good appearance.

—

FAT CATTLE.

For the best fat ox, cow, or steer, $20.

For the second best,	$20	For the third best,	$8

FAT SHEEP.

For the best wether,	$10	For the third best,	
For the second best,	5	Volume of 'Transactions.'	

Applicants for the premiums on fat cattle and sheep must furnish a statement of the manner of feeding the animal, the kind, quantity, and cost of food, to entitle them to the premiums.

—

ON HORSES—*Over four years old.*

For the best stallion,	$20	Best breed'ng mare & ct.	$20
For the second best,	12	For the second best,	12
For the third best,	8	For the third best,	8
For the fourth best,		For the fourth best,	
Volume of 'Transactions.'		Volume of 'Transactions.'	

For the best pair of matched horses, $15.

For the second best,	$10	For the fourth best,	
For the third best,	5	Volume of 'Transactions.'	

Three years old Studs and Mares.

For the best Stud,	$10	For the best Mare,	$10
For the second best,	5	For the second best,	5
For the third best,		For the third best,	
Volume of 'Transactions.'		Volume of 'Transactions.'	

A variety of horses possessing size, strength, and endurance for field labor, combined with that action which qualifies for the carriage or saddle—in short, the *horse of all work*, is probably the most profitable class which our farmers can now engage in rearing, and to such, therefore, will the preference of the Society be given.

—

SWINE—*Over ten months old.*

For the best Boar,	$10	Best breeding Sow,	$10
For the second best,	8	For the second best,	8
For the third best,	5	For the third best,	5
For the fourth best,		For the fourth best,	
Volume of 'Transactions,'		Volume of 'Transactions.'	

In awarding premiums on hogs, reference will not be had exclusively to size or to present condition, but to that form and that proportion of bone and offal to more valuable parts, which promises the greatest value from the least amount of feed.

—

SHEEP—I. Long Woolled.

For the best Buck,	$10	For best pen of 3 Ewes,	$10
For the second best,	8	For the second best,	8
For the third best,	5	For the third best,	5
For the fourth best,		For the fourth best,	
Volume of 'Transactions.'		Volume of 'Transactions.'	

For the best pen of five lambs, $5.

II. Middle Woolled.

For the best Buck,	$10	For best pen of 3 Ewes,	$10
For the second best,	8	For the second best,	8
For the third best,	5	For the the third best,	5
For the fourth best,		For the fourth best,	
Volume of 'Transactions.'		Volume of 'Transactions.'	

For the best pen of five lambs, $5.

III. Fine Woolled.

For the best Buck,	$10	For best pen of 3 Ewes,	$10
For the second best,	8	For the second best,	8
For the third best,	5	For the third best,	5
For the fourth best,		For the fourth best,	
Volume of 'Transactions.'		Volume of 'Transactions.'	

For the best pen of five lambs, $5.

The term "long-woolled" is designed to include the Leicesters, Lincolns, Cotswolds, and all the English varieties of sheep which furnish the quality of wool suitable for combing—the "middle-woolled," the South Down, the Norfolk, Dorset, Cheviot, native, &c.,—the "fine-woolled," the Spanish and Saxon varieties of the Merino and some of their crosses.

FARM IMPLEMENTS.

For the best Plow,	$50	Best threshing Machine	$20
For the second best,	30	For the second best,	10
For the third best,	20	For the third best,	
For the fourth best,		2 Vols. of 'Transactions.'	
2 Vols. of 'Transactions.'		For the best horse Rake,	8
For the best subsoil plow,	20	For the second best,	5
For the best Harrow,	8	For the third best,	
For the second best,	5	Volume of 'Transactions.'	
For the third best,		Best fanning Mill,	8
Volume of 'Transactions.'		For the second best,	5
For the best Cultivator,	8	For the third best,	
For the second best,	5	Volume of 'Transactions.'	
For the third best,		For the best straw Cutter,	8
Volume of 'Transactions.'		For the second best,	5
For best grain & seed Drill,	8	For the third best,	
For the second best,	5	Volume of 'Transactions.'	
For the third best,		Best improved ox Yoke,	5
Volume of 'Transactions.'		For the second best,	
		Volume of 'Transactions.	

Implements not presenting any new and valuable improvements, will not be entitled to premiums. Implements and machines must be tested, as far as possible, in the presence of the committee.

—

BUTTER AND CHEESE.

For the best sample of Butter, not less than 80 pounds	$20	For best sample of Cheese, not less than 100 pounds,	$20
The second best,	12	The second best,	12
The third best,		The third best,	
Two Vols. 'Transactions.'		Two Vols. 'Transactions.'	

The butter offered for premiums may be presented in butter tubs, jars, or firkins.

The claimants for premiums on butter must state in wri-

ting the time when it was made; the number of cows kept on the farm; the mode of keeping; the treatment of the cream and milk before churning; the mode of churning, winter and summer; the method of freeing the butter from the milk; the quantity and kind of salt used; whether saltpetre or any other substances have been employed.

Those who present cheese for the premiums offered, must state in writing the time when it was made; the number of cows kept; whether the cheese is made from one, two, or more milkings: whether any addition is made of cream; the quantity and kind of salt used; the quantity of rennet used, and the mode of preparing it; the mode of pressure, and the treatment of the cheese afterward.

—

MAPLE SUGAR—50 lbs.

The best specimen, $15 | The third best, $5
The second best, 10 | The fourth best,
Volume of 'Transactions.'

Applicants for the premiums on maple sugar will be required to furnish a statement of the manner of making and clarifying the sugar.

CORN STALK SUGAR.

For the best experiment in the manufacture of sugar from corn stalks, from one acre of northern corn cultivated for the purpose, and the juice extracted by iron rollers so as to obtain the maximum quantity of sugar; with a full account of the process and expenses, $100

—

ON SILK.

Best half bush. Cocoons, $15 | For the third best $5
For the second best, 10 | For the fourth best,
For the third best, 5 | Volume of 'Transactions.'
For the fourth best, | Best spec'n manuf. Silk, 15
Volume of 'Transactions.' | For the second best, 10
Best pound of reeled Silk, 15 | For the third best, 5
For the second best, 10 | For the fourth best,
Volume of 'Transactions.'

SILK REEL.

For the best, $10 | For the second best,
Volume of 'Transactions.'

—

DOMESTIC MANUFACTURE.

Best pr. woollen Blankets, $5 | For the best hearth Rug, $3
Best 10 yards of Flannel, 5 | Best 12 yards Kersey, 3
Best 12 yds ¼ woollen Cloth, 5 | Best 15 yards rag Carpet, 3
Best 15 yds wool Carpet, 5 | Best 15 yds tow Cloth, 3
Best dble carpet Coverlet, 5 | Best lb. sewing Thread, 2
Best 10 yards Linen, 5 | Best pair knit Stockings 1
Best 12 yds linen Diaper, 5 | Best pair wove Stockings, 1

—

ON VEGETABLES.

For 6 best stalks Celery, $5 | 2 best purple egg Plants, $1
3 best heads Broccoli, 2 | Best half peck Lima Beans 1
3 best heads Cauliflower, 2 | Best half peck Windsor do 1
12 best white table Turneps, 1 | Best bunch double Parsley, 1
For the 12 best Carrots, 1 | For the 3 best Squashes, 1
For the 12 best table Beets, 1 | For the largest Pumpkin, 1
For the 12 best Parsneps, 1 | 12 best ears seed Corn, 1
For the 12 best Onions, 1 | Best ¼ peck table Potatoes, 2
3 best heads of Cabbage, 1 | For 2d best half peck table Potatoes, 1
For the 12 best Tomatoes, 1 |
Best variety of Seedling Potatoes, $5

Discretionary premiums will be awarded on choice garden products not enumerated above.

—

ON FRUITS.

For the greatest variety of table Apples, $5.
For the second greatest, $3 | For the third greatest,
Volume of 'Transactions.'

For the best twelve sorts, not less than three of each, $3.
Best new Seedling Apple, $5.
For the greatest variety of table Pears, $3.
For the second greatest, Vol. 'Transactions.'
For the greatest variety of winter Pears, "
For the best twelve Quinces, "
For the best twelve Peaches, "
For the best twenty-four Plums, "
For the best six bunches of native Grapes, "
For the best six bunches of foreign Grapes, "

ON FLOWERS.

For the greatest variety and quantity, $5.
For the second greatest, $3 | For the third greatest,
Volume of 'Transactions.'

For the best Floral Ornaments, $5.
For the second best, $3 | For the third best,
Volume of 'Transactions.'

For the best Seedling Dahlia, $3.
For the second best, 2.
For the best twenty-five varieties of Dahlias, $5.
For the second best, $3 | For the third best,
Volume of 'Tranactions.'

—

PLOWING MATCH.

First premium, $15 | Third premium, $5
Second premium, 10 | Fourth premium,
Volume of 'Transactions.'

Each competitor will be required to plow ¼ of an acre of sward land in 75 minutes; the furrows not to be less than 12 inches wide and 6 deep—plowman to drive his team.

—

FIELD CROPS.

(AT THE WINTER MEETING.)

Best crop of Wheat not less than two acres, $15 | The third best,
Two Vols. 'Transactions.'
The second best, 10 | Best crop Indian Corn not less than 2 acres $15
The third best,
Two Vols. 'Transactions.' | The second best, 10
Best 2 acres spring Wheat 15 | The third best,
The second best, 10 | Two Vols. 'Transactions.'

For the best crop of Barley, not less than two acres, $10.
The second best, $5 | The third best,
Volume of 'Transactions.'

For the best crop of Rye, not less than two acres, $10.
The second best, $5 | The third best,
Volume of 'Transactions.'

For the best crop of Oats, not less than two acres, $10.
The second best, $5 | The third best,
Volume of 'Transactions.'

For the best crop of Potatoes for the table, not less than one acre, $10.
The second best, $5 | The third best,
Volume of 'Transactions.'

For the best crop of Potatoes, quantity considered, not less than one acre, $10.
The second best, $5 | The third best,
Volume of 'Transactions.'

For the best crop of sugar Beets, not less than half an acre, $10.
The second best, $5 | The third best,
Volume of 'Transactions.'

For the best crop of Mangel Wurzel, not less than half an acre, $10.
The second best, $5 | The third best,
Volume of 'Transactions.'

For the best crop of Ruta Baga, not less than one acre, $10.
The second best, $5 | The third best,
Volume of 'Transactions.'

The best crop of Carrots, not less than one acre, $10.
The second best, $5 | The third best,
Volume of 'Transactions.'

The best crop of Peas, not less than one acre, $10.
The second best, $5 | The third best,
Volume of 'Transactions.'

Those who present claims to premiums for farm crops, must state in writing the following particulars:—The condition of the soil at the commencement of cultivation for the crop; the previous crop and cultivation, and quantity of manure used upon it; the quantity and kind of manure the present season; the quantity and sort of seed used; the time and manner of sowing, cleaning, and harvesting the crop; the amount of the crop determined by actual weight or measurement; and the expense of cultivation. The land shall be measured by some sworn surveyor, and the claimant of the premium, with two other persons who assisted in measuring, shall certify under oath as to the quality

produced from the piece of land mentioned in the certificate of the surveyor.

ESSAYS.

(*For publication in the next volume of Transactions.*)

For the best essay on the different varieties of wheat, $20
For the best essay on the diseases and insects injurious to the wheat crop, 20
For the best essay on subsoil plowing; with the results of actual experiments in the state of New York, 20
For the best essay on the introduction and culture of new agricultural products, 20
For the best essay on the diseases of silk worms in this climate, and the means of prevention and cure, 20

DISCRETIONARY PREMIUMS

will be awarded for such implements and products not enumerated above, as shall be deemed worthy of notice and encouragement.

RULES AND REGULATIONS.

Applicants for premiums are requested to pay particular attention to the premiums on dairy Cows, fat Cattle and fat Sheep, Butter and Cheese, field crops and Sugar.

The statements required from those who compete for field crops, must be sent to the Recording Secretary, Albany, previous to the first of January, 1844, and the premiums will be awarded at the annual meeting of the Society, on the third Wednesday of January.

All premiums will be paid in cash or plate, at the option of the winners.

The premiums for Essays and for agricultural Implements, will be open to the United States; but all others will be confined to residents of this state, who are members of this Society, or who may become so by the payment of one dollar on entering their articles.

Competitors for the premiums on Essays must forward their manuscripts to the Recording Secretary, at Albany, previous to the first of January, 1844, free of postage.

☞ Particular rules and regulations of the exhibition, together with the list of awarding committees, will be published hereafter.

The measure used to ascertain the quantity of milk given by Mr. Smith's cow, was the wine quart, the same as is generally used in England, according to Mr. Berry's report of great milkers. The only utility that we can perceive in cutting the tail, is to let blood, and this could be better done in the usual way of lancing a vein; but this, as well as the application of spirits of turpentine, we consider entirely unnecessary. To produce the greatest quantity of milk, a variety of good food and exercise, under ordinary circumstances, is all that is necessary to ensure a strong steady appetite. For the manner in which great milkers are treated and fed in Great Britain, see Tour in England for the present number. Mr. Smith's cow has produced more milk than any other we have heard of in the United States, save a grade Durham, owned by Dr. Martin, of Kentucky. We have been informed that she averaged 41 quarts per day, for three weeks in succession. Her feed, during this time, was the best of clover and blue grass pasture.

For the American Agriculturist.

AN EXTRAORDINARY MILKER.

Repository of the American Institute, N. Y., May 10, 1843.

Dear Sir—The following communication in relation to a remarkable cow, which commanded the premium at the 15th annual fair, was made by Mr. Smith, the owner, at the special request of the premium committee, and was intended to have been embraced in the annual report of the institute, directed to be printed by the legislature; but owing to some neglect or mistake in the carriers of packages to Albany, it did not come to hand in time to be inserted. I shall therefore be obliged by your inserting it in the American Agriculturist.

T. B. WAKEMAN,
Cor. Sec., &c.

The full-blooded Durham Cow, Victoria, 8 years old, was purchased at a fair, near Liverpool, in September, 1840, by Captain Richardson, of the ship Brooklyn, and came to the present owner in July, 1841. No certain pedigree was obtained, nor can be, as she was purchased for private use, and the name of the person who sold her can not now be ascertained.

Her Milking Quality.—She calved on the 2d September, 1841. The calf was taken away the sixth day thereafter. On the 9th September, she gave 34¾ quarts of strained milk; on the 10th, 34½; on the 11th, 34; and for twenty days varied from 34 to 32 quarts per day; for three months in succession she gave not less than 32 quarts per day; and from the 8th of September, 1841, to the 8th of July, 1842 (including the winter months), the average quantity was 27 quarts per day: the milk was strained and measured once a week. As she will come in *fresh* the first of December, from the middle of July she fell off gradually from 15 to 12 quarts, the quantity she now gives. The quality of milk is excellent.

Her Feed.—Besides grass in its season, and hay, she was fed with ground corn and oats, meal, shipstuff, and vegetables, such as carrots, sugar beets, and potatoes; changing the kind of feed once a week, as it was found that on any one course of feed more than a week, the quantity of milk diminished, and by the change the quantity was sustained.

Treatment.—I had her tail cut once in 6 or 8 weeks, and allowed it to bleed freely, and at the same time put on her loins a spoonful of spirits of turpentine; immediately after each cutting of the tail and use of turpentine, her appetite was stronger and the quantity of milk increased.

Cyrus P. Smith.

Brooklyn, Oct. 17th, 1842.

JEFFERSON COUNTY AGRICULTURAL AND HORTICULTURAL SOCIETY FAIR.

The fair of the above flourishing society was held at Washington, Miss., on the 28 and 29 April, a full account of the proceedings of which, and the reports of the several committees, we find in the Free Trader. We would gladly copy the whole, but from the crowded state of our columns can only give place to the spirited letter of our correspondent, Mr. Affleck. We understand that the president, Col. B L. C. Wailes, gave an excellent address upon the occasion, with which we hope to be favored as soon as published. We perceive that Mr. Affleck objects to the great weight of our northern plows. We can make them as light as the south will please to have them; but this rather injures their effective work. We suspect the hands who use these plows, do not exactly understand their management; and we would refer to Mr. Cornell's letter in May No., p. 50, where weight and shape are explained; also to a communication of the same on the management of the side-hill plow, p. 370, Vol. I., of our paper.

For the American Agriculturist.

Ingleside, 29th April, 1843.

My Dear Sir:—Our fair is over; and I sit down, agreeably to my promise, to give you a short account of it.

You are aware, I presume, that we have had one of the most extraordinary springs ever experienced in this region—cold, wet, dreary, and extremely backward. Two heavy falls of snow, both, I think, after the middle of

March—much of the corn cut down—cotton only now making its appearance—many beautiful and somewhat tender trees, shrubs, and flowers, killed by the frost—no vegetables fit for the table, if we except a little asparagus, and a few peas, radishes, &c. Then, to wind up, we had, on the night of the 21st inst., the most fearful storm I ever witnessed. During the whole night it was one continued flash of lightning, with thunder to match, and rain in such torrents, as to flood the whole country, wash up the crops, carry away the fences and the most substantial bridges, and destroy hundreds of acres of cotton and corn. All these things combined to lessen the interest of our fair. Still we had a pleasant and an interesting meeting.

Yesterday, Friday, was the principal day, and fortunately, it proved a pleasant one, though dusty in the extreme to those who had far to travel. I should say that there were between 600 and 700 assembled in and around the church, to hear the president's address, a majority of whom were ladies. The front of the gallery and the pillars supporting it, as also the pulpit, were gayly bedecked with flowers and wreaths of evergreens, and on each side of the speaker sat vases of rare and beautiful flowers—decorations effected in the morning, by a committee of young ladies. The address was a happy one, and such as was expected from the known talent of the speaker. One part of it, however, casting a passing gloom over the spirits of all who have the welfare of the society and the improvement of our agriculture and horticulture at heart—that part, wherein he expressed his intention of resigning his office of president; an office he has so effectively filled during these first three years of the society's existence. The hope is strong, however, that he will be prevailed upon to accept of the continuation in office, that the vote of the society is certain to press upon him. But to the business of the day.

The rest of the doings were to come off in the college buildings and grounds, to which all now adjourned. There to the stock pens I now made my way, and found, to my sad regret, many of them untenanted, for reasons already given. Few could spare hands, from the necessary repairs of the damages effected by the storm, to bring stock; many, like myself, could not bring their animals, from loss of bridges, &c. The splendid toll bridge over the Homochitto was carried off, so that I was disappointed in bringing up the fine cows I boasted of, and also Mr. Foster's bull, Coronet, from Cold Spring. Still, there was a considerable turn out—especially of horses. Mr. Hall's enormous bull, Beltzhoover, and the Berkshire boar, Newbury, seemed to be the most "prominent faitures," as poor Power would have said. The latter, you know—the former is perhaps the largest animal of his kind you ever saw, and in the highest order: his skin shone like satin. He has improved greatly since he was last shown.

In the college halls I found assembled an array of beauty, that would have been dangerous for you, in your lone, bachelor state, to have faced! The number of the sterner sex, who were crowded in around them, showed how powerful their attractions were, when added to the bouquets of flowers, the fruits and vegetables, the numerous specimens of the handiwork of our planters' wives and daughters, consisting of quilts, worsted-work of various kinds, knitted or netted caps and capes and collars, rolls of linseys and cotton cloths, saddles and bridles, specimens of butter, &c., &c.

Another point of attraction, was the splendid collections of rare and valuable fossils, minerals, Indian remains, bones of animals, nondescript and now extinct, made by Col. Wailes, and by Dr. Dickenson. One room was devoted to these, and was crowded during the whole day.

No public dinner being served up, as has been customary hitherto, free to all, the company divided into parties, scattered over the grounds, to lunch—those of us residing near, carrying with us to dinner what strangers we could gather together.

To-day the members of the society met for the transaction of business, and with the expectation of a plowing match coming off, which was postponed on account of the late storm, and the impossibility of getting the teams forward. That there might not be an entire disappointment, I sent over one of the improved Peacock plows, and one of the side-hill plows, of Barnaby and Moores' make, which you forwarded me. I have not seen the report of the committee, but fear they are entirely too heavy—they fagged our teams down completely. Yours, truly,

THOMAS AFFLECK.

For the American Agriculturist.

SOUTHERN CALENDAR FOR JUNE.

WARM weather will now have commenced in earnest, and I advise the merciful man who "is merciful to his beast," to call all hands at 12 o'clock, and after having fed and curried all work animals, to be allowed to rest until 3 o'clock, being satisfied that the horse and driver can do as much work in the day, as by going all the time. For two months previous to this, I allow from 1 to 1½, or 2 hours in the middle of day, as the days acquire length and warmth. I have followed this plan for years, and my neighbors know that I am generally close alongside with any of them, *without Sunday work either*.

It is important now to stir the land every 10 days, and if farmers will lay aside the turning and shovel plow and use the cultivator, sweep, or double shovel, they can do so. The crop now having size to shake the earth somewhat, the hoes are not required so much, especially if the crop has been gotten over the second time early, and these implements started well up. The cotton will require the hoes to be passing through, so as to clear away all grass and weeds left by the plow, to clean round stumps and trees, and draw earth lightly around the plant, leaving no ridges as thrown with the plow, being less surface exposed to the sun's rays.

Early corn will be old enough to give the last plowing, which I do when in bunch, before tassel "heaves in sight." Before plowing, sow cow peas at the rate of a peck to the acre; the plows in plowing corn will scatter and cover them. They will be an excellent preventive against the weeds and grass springing up, after the blades are stripped for fodder, and will at the same time give a fine bite to cattle after corn is gathered, or afford an excellent manuring to the land.

The grain crop not cut now claims attention, and must be got off the land; and if got off the land in time, the land should be broken up with turning plows, and cow peas either sowed broad cast, 2 to 3 pecks per acre, or drilled at 2½ to 3 feet distance, 1 peck per acre, and covered with shovel plows.

The first planting of sweet potatoes will now require their last working; send hands along the row to lay the vines on the ridge, then start your shovel plows to run some 3 furrows between every ridge; hoes will follow to draw up this earth to the top of the ridge, cutting and pulling out all grass and weeds, and covering a part of the vines along the ridge, being careful not to cover the crown or the end of the vine. Continue to plant out drawings on the vine all this month, when suitable seasons; they will have time to make good potatoes yet. Vines make the best seed, and should be planted as follows:—Cut the vines about 1 foot long; have a hole made in the ridge with a dibble, as in planting the drawings; then, either with a stick, with a notch cut in one end, or the finger, thrust down a vine or two doubled, press the earth well around, leaving an inch or two out of the earth. For a winter crop of Irish potatoes, procure the long-red, and plant in rich low ground, as you did in the spring, excepting no leaves or straw. They will make a good crop if planted from 1st to middle of month. The garden will require some attention in keeping clean.

M. W. PHILIPS.

For the American Agriculturist.

NORTHERN CALENDAR FOR JUNE.

IN the early part of last month, the soil and atmosphere were kept continually saturated by transient showers and heavy rains, which have given an impulse to vegetation, sufficient, it is to be hoped, to counteract the temporary drought, frequently experienced in the early part of this month In case of such drought, it would be advisable to make frequent use of water in the flower borders, and also in the strawberry beds, by which this fruit will be enabled more fully to develop itself, and the plants produce a more abundant crop.

KITCHEN GARDEN.—The main point in this month, is to keep the garden entirely clear of weeds, as their growth will now be very luxuriant, and if thoroughly subdued, will be much more easily kept out the succeeding months. This is especially requisite with cucumbers and melons, around which the ground should be kept entirely clean and loose. Sweet potatoes should now be well cultivated, and the earth drawn up about the roots. Cabbages for autumn and winter use, can be planted out, and celery plants be transferred into trenches. Peas may be sown for late crops, although they do not bear so abundantly as those sown earlier in the season. Lettuce may be sown and transplanted every week, in order to ensure a regular succession through the season. This should be done in moist weather, or if in dry weather, late in the afternoon, accompanied with a plentiful watering. During the month sow kidney and other beans, for successive crops, and in the early part of the month, a few Lima beans may be planted for a late supply. Turneps for late crops may also be sown in this month.

FRUIT GARDEN AND ORCHARD.—During this month apple and other fruit trees can be trimmed. For this work, the present season is preferable to the winter, for the reason, that the sap, being in full circulation, will exude, and covering the wound, heal it in a short time. On the contrary, in the winter, no sap can exude, and the branch will frequently be quite dead for some inches from the wound. All useless limbs and upright shoots should be cut away, and the tree be trimmed to an open head. In plum-trees, all black knots, formed by the insect, should be cut away and burnt, or the disease will spread rapidly. Cherries will not bear much pruning, and it is generally best to allow them to grow naturally.

All stone fruits frequently bear in such profusion, that the tree is unable to mature them all, and they are thus of comparatively a small size. To remedy this, the cultivator should thin out the fruit by hand, leaving only a moderate crop; the nourishment of the tree being thus devoted to a limited quantity, will produce a larger and more delicious fruit. When trees are allowed to bear too abundantly, the great efforts made to mature all their fruit, will sometimes exhaust them to such a degree as to induce diseases, from which it will often take them several years to recover.

During this month, insects will frequently attack fruit trees in great numbers. For some of these, as the slugs and others of the same nature, a sprinkling of ashes or lime is the most immediately destructive. For the apis and smaller insects of the same habits, a solution of whale-oil soap, applied with a syringe, is the most efficacious. Caterpillars can be destroyed while they are yet in small clusters, by means of burning sulphur.

FLOWER GARDEN.—Plant out in the borders perennial and autumnal herbaceous plants, which have been sown in seed beds. This should be done near evening, and always accompanied with watering, unless the weather should be moist or wet. Box edging can still be trimmed during moist weather, as also hedges of privet, hawthorn, &c., although for these latter, earlier in the season would have been preferable. The turf in the pleasure-grounds and lawns should be kept well mowed; the oftener this is done, the more rich and velvety appearance it will assume. The gravel walks and carriage drives should be kept well cleaned, and free of weeds and grass throughout the summer.

It is in this month that the numerous wild flowers of our fields and woods abound in the greatest beauty and luxuriance; many of these are exceedingly beautiful, and well worthy of cultivation in the private garden. The Lobelia Cardinalis, which abounds in the swamps, is one of the most splendid of these, and with many others has been transferred to our own garden with entire success. To ensure their living, a portion of the natural soil should be transplanted with the roots, and a moist day, or late in the afternoon, selected for the purpose. Frequent watering should be applied for some days after. There are few who have not admired these gems, which so thickly cover Nature's carpet; and when they can be so easily transferred to the parterre, neither the botanist nor amateur should be willing to deprive himself of so cheaply-purchased a pleasure.

S. B. PARSONS.

FOREIGN AGRICULTURAL NEWS.

By the arrival of the steam-packet Caledonia, we are favored by files of European Journals to the 4th of May.

Markets.—Cotton, in the lower grades there had been a decline of $\frac{1}{4}$ to $\frac{3}{8}$ per lb., prices for the better qualities remained firm. The total sales during April at Liverpool were 115,000 bales, the receipts 300,000, leaving a stock on hand of about 800,000 bales, against 500,000 at this time last year. Business in the manufacturing districts is improving, and continues to be quite satisfactory. Flour and grain declining, and in limited demand. Tobacco, large sales. Naval stores and rice in fair request. Beef, brisk sales. Pork, dull. Cheese, the same. Lard and Tallow steady. Oil-cake, dull and not much demand expected till August or September.

Money.—There is no change since our last, and it continues abundant, large sums in specie are continually shipped to America for investment.

Stocks.—These at last begin to move again in Europe, and sales of New York have advanced 2 to 3 per cent.

Crops.—These are represented as generally promising, especially wheat and grass, which were very forward.

Irrigation.—We find an excellent paper in the London Farmers' Magazine on this subject, showing the beneficial and fertilizing properties of water in irrigation; more particularly when applied to meadows. But as this subject was pretty fully treated by us, under head of Tour in England, page 231, November No., we shall make no synopsis of the article. We wish, however, that we could impress upon our farmers the necessity and profit of irrigation in our arid summer climate.

A Wild Boar.—One of these ferocious animals was lately shot in the Forest of Raulaing, in the Vosges, which weighed 615 lbs. Nearly 1,300 shot were fired at him, and he killed more than 50 dogs.

Productiveness of the Vine.—Mr. Loudon states, that one plant of the red Hamburg sort, in the vinery of the gardens at Hampton Court, has produced 2,200 bunches, averaging one pound each, or in all nearly a ton; and its parent, in Essex, has produced 2,000 bunches, of nearly the same average weight.

Lime and Salt.—In one of Professor Johnston's experiments, he finds that lime is a good strengthener of the straw, and forwarder of the kerning and ripening of wheat and other grain; while salt appears to help fill the grain, and increase the weight per bushel.

Extraordinary Fecundity of a Cow.—The Blackburn Standard says, that five weeks since a cow, belonging to a farmer at Sudden Bridge, near Rochdale, in this county, gave birth to four calves, three males and one female. Two of them in color are roan, and the other lighter colored. The cow is of the Short-horned Holderness breed. The exhibition of this curious phenomenon has brought to the coffers of the lucky owner a considerable sum of money, and he has latterly been offered 150*l.* for the stock. The cow and her remarkable progeny are all doing well, even better than could have been expected. We understand this is the first instance on record of such a number of calves being brought forth at one birth.

Attar, or Otto of Roses.—We copy from the Gardener and Practical Florist, a simple method of making this delicious perfume, and trust that some of our fair readers will essay some experiments from American roses this season, and give us an account of their good or ill success. Otto of Roses is made from the hundred-leaved rose (*Rosa centifolia*), which species is also used exclusively in the distillation of rose water. The

genuine otto of roses is not, it is said, prepared by distillation, but by putting a quantity of carefully-picked rose-leaves into a jar or cask, with just sufficient water to cover them. The vessel is then set in the sun for a few days, and in about a week the otto (a butyraceous) oil collects in the form of a scum upon the surface, and is removed by a piece of cotton.

Superiority of Span-Roofed Green-Houses.—Mr. McNab of the Caledonia Horticultural Society, contends that the *span-roof* is much superior for Green-Houses to the *lean-to.* But the house should extend north and south, so as not to be so much exposed to the rays of the meridian sun. East and west roofs make the temperature by day and night too unequal, and plants frequently perish in consequence of it. He found that the same kind of plants which become soft, spongy, and drawn up in the lean-to house, continued hard, woody, firm, and bushy, in a span-roofed house. It also required less heat, was more open to a good circulation of air, and the plants were not so likely to perish, for the temperature, winter or summer could be kept more equable.

Society of German Landowners.—Mr. Handley has furnished in the Journal of the Royal Agricultural Society, an interesting paper on the meeting, &c., of the German landowners. It is similar to that of the New York State Agricultural Society. It was established in 1837, and holds annual meetings, and publishes its Transactions. The meeting at Doberan occupied eight days, and every day the members, ladies as well as gentlemen, sat down to dinner at a spacious table, to the number of 700, the Grand Duke and his family heading it.

Fine Wool.—As the subject of fine wool is attracting much attention in the United States, we make some curious extracts from Mr. Handley's paper, showing to what an extreme the Germans carry this business. He says:—

"The fleeces, to the number of 300, were exhibited in a spacious tent, 150 feet long by 50 wide, placed upon tables, and most judiciously arranged under the direction of Mr. Jeppe of Rostock. It is impossible for a stranger to conceive the extreme attention paid to this subject in Germany, where immense flocks are reared for their wool alone, kept, during the greater part of the year, in large barns, and so carefully attended, that neither dew nor rain is allowed to fall upon them. In the King of Saxony's flock, which I visited, I found wethers kept to the age of nine or ten years, solely for the 2 lbs. of wool which they annually yielded. If subjected to a varying temperature, or checked perspiration, a knot is formed on the staple, to which my attention was directed by a very strong magnifying power, and which very materially deteriorates from the value they attach to the article. Next to equality, fineness of texture is the great desideratum; and a beautiful machine has been invented by Mr. Jeppe for the admeasurement of the thickness of the wool, and the proof of its strength, which unites the minute workmanship and delicacy of watch-work. By this instrument 100 hairs of each fleece, selected from nine different portions of the body, forming an average of fineness, are subjected to a given pressure, which is registered on a very minute index. The result of one experiment, I was informed, was that an Austrian fleece had been produced, of which twelve hairs only equalled in thickness one Leicester! The fleeces exhibited were sent from Saxony, Hungary, Austria, and from every sheep district of Germany.

"In the museum attached were samples of every wool in the known world, comprising even our most recently established colonies, carefully washed, weighed, and sorted, with such remarks as tended to illustrate the subject."

Agricultural Implements.—As those of Germany are notoriously antique, and badly constructed, we notice that many agricultural implements are now introduced into that country from England, and as our own are both cheaper, lighter, and frequently superior to the English, we would recommend to the mechanics of the United States to try their fortune in Germany.

Siberian Vetch.—This grows from 10 to 12 feet long; also the Siberian bear's claw, a new plant, said to be a strong one, very healthy for nursing ewes, requiring but light land, with deep roots, and shooting early in spring. Sheep like it so well that they leave no part uneaten.

Sheep Raised on Mulberry-leaves.—Much amusement was created by a gentleman whose ruling passion was to raise a flock of Merinos, on mulberry-leaves. He was followed about by an ancient ram, to which he supplied his favorite food from a basket which he carried with him.

We would recommend the said gentleman's coming over here with his sheep, and eating up our Morus Multicaulis.

Destroying Rats and Mice.—We find a simple, and as we think, an effectual remedy for the destruction of these vermin by Mr. Carr. A little manœuvring may be judiciously used to attract the enemy to a suitable position—suppose any unoccupied room in an outhouse, where they particularly abound. Here they should be fed with any favorite food—fish or malt I believe they are fond of—and then with, not a preparation of arsenic, which they are much too clever to touch, but pills, the size of peas, made of equal portions of wheaten flour and powdered sugar, intimately mixed with one sixtieth part of that weight of dissolved phosphorus—say ¾ oz. phosphorous to 1 lb. of flour and sugar; cold water should be added to make the mass manageable, and the pills finally rolled in dry flour, and kept secluded from light and air. A couple of pills may be thrown into each rat-hole, or any quantity left on a plate in a dark situation, by which the double object is attained of attracting the animals by the luminousness of the phosphorus, and preserving it from too rapid evaporation. The pills should be replaced as often as eaten, and that without grudging, as, although all the slain may not be found, it may be relied on that "every bullet has had its billet." Still, in a day or two, many rats will be seen running to water, where they die from excessive drinking. No domestic animal appears to be in danger of eating this preparation except fowls. Dry weather is most favorable to its successful application, as damp, whether of situaion or atmosphere, dissolves, and consequently weakens, the phosphorus.

Rust and Mildew in Wheat.—Wheat struck with the rust or mildewed, should be cut at once, no matter how green in appearance, as this is the only chance of saving anything from it.

Copying Articles without Credit.—We have spoken of this thing till we are heartily tired of it. We have therefore come to the conclusion, that all exchange papers hereafter, except where it appears to be a matter of occasional inadvertence, which can not do us the justice of acknowledging the source whence they take their extracts, when copying from us, shall be struck from our list.

☞ Volume I. of the American Agriculturist being entirely out of print, we have struck off a new edition, and are now prepared to furnish all orders. Price, neatly stitched with handsome paper covers $1; bound in cloth, gilt, $1.25.

Editor's Table.

NOTICES OF THE PRESS.

TRANSACTIONS OF THE NEW YORK STATE AGRICULTURAL SOCIETY, *together with an abstract of the proceedings of the county Agricultural Societies, for the year* 1842.—This is an octavo volume of upward of 500 pages, with numerous embellishments. Several of the papers are able and well written; and others we think pretty flat, with nothing sufficiently new or striking to recommend them for publication. The reports of the county societies were greatly cut down by the secretary, and in most instances we think might have been omitted altogether. We can not perceive the utility or profit in making the Transactions a complete omnium gatherum for the whole State, and half the world besides, and publishing them in an expensive volume that few will ever read.

The Transactions, in our humble judgment, should be confined solely to the proceedings of the State Society, and its Prize Essays, and such facts from the County societies as are new, striking, and of marked practical utility. But in this matter, as we understand, there is little or no discretion allowed to the corresponding secretary, and he is obliged to make out such reports, and give such papers, as are forwarded him for insertion. Mr. Randall has therefore made the best of his subject with his usual ability, and deserves the thanks of the community for his services. We have before said, and repeat, that the secretary ought to be a salaried officer, and devote his whole time to the affairs of the society. If another year the expense of printing could be cut down one half, and that amount appropriated to this object, it would prove much more beneficial to the society and the agricultural community at large. We should like much to quote a few pages from the Transactions, but have not room for even a synopsis. We are obliged to Luther Tucker, Esq., Recording Secretary of the Society, for the receipt of the publication.

THE REVISED STATUTES OF NEW YORK, *reduced to questions and answers, for the use of schools and families, by William B. Wedgewood, Esq., published by Saxton & Miles,* 205 *Broadway.*—This is one of the most useful works that could be published. It should be immediately put into the hands of every scholar in the state of New York. We should not allow our children, who are to take our places, and make and defend the laws of our land, to grow up entirely ignorant of the first principles upon which our government is founded.

THE PICTORIAL HISTORY OF THE UNITED STATES, *from the discovery of the Northmen to the present time, by John Frost, to contain* 1120 *pages, octavo, with numerous embellishments, and be completed in twenty parts, monthly, at* 25 *cents each.*—Nos. 1 and 2 of this work are now out. It is written in a clear, forcible style, is exceedingly well got up, and supplies the very history that has been long wanted for popular use in the country. Saxton & Miles, publishers.

THE FARMERS' ENCYCLOPEDIA.—No. 6 is now issued, which ends the letter C. Price 25 cents each No. Carey & Hart, Philadelphia.

THE ENCYCLOPEDIA OF MURRAY'S GEOGRAPHY.—We are in receipt of No. 7 of this able work, price 25 cents per No. Lea & Blanchard, Philadelphia.

THE HORSE, *a new edition, by William Youatt, London,* 1843.—This celebrated work has been completely revised, and much of it almost entirely re-written by its able author, who, from being a practical veterinary surgeon, and one of the editors of the Veterinarian, and withal a great lover and excellent judge of the animal, is particularly well qualified to write the history of the noblest of all quadrupeds. The book comprises nearly 600 pages, and is got up in a typographical style, far superior to the first edition. The embellishments, also, are very superior, and will class among the finest wood-cuts we have ever seen. The number of these is considerably increased in this volume; and what makes them of more value, they are actual portraits of the most celebrated horses of the turf, field, road, draught, and ponies of England. We observe a quotation at page 41, from one whom he may justly call "a valued correspondent," viz., Francis Rotch, Esq., of Otsego, this state, on the superior constitution of American stock. Mr. R. gives his opinion from considerable experience as a breeder in both countries. We have often expressed the same views, especially in regard to horses, which have been received with great credulity in certain quarters. We have, however, beat the English in trotters, and we shall see when a trial ever takes place, if we can not do it in a bruising race, where bottom is the grand test. Other domestic animals, we are confident, improve here in constitution.

Messrs Lea & Blanchard of Philadelphia, have republished the above work, omitting a few of the first pages, and have supplied their place by matter quite as valuable, and perhaps more interesting to the reader in this country: it being nearly 100 pages of a General History of the Horse; a Dissertation on the American Trotting-Horse, how Trained and Jockeyed; an Account of his Remarkable Performances; and an Essay on the Ass and Mule, by J. S. Skinner, Esq., of Washington, Assistant Post-Master General, and late Editor of the Turf-Register and American Farmer. Mr. Skinner is one of our most pleasing writers, and has been familiar with the subject of the horse from childhood; and we need not add, that he has acquitted himself well of his task. He also takes up the important subject, to the American breeder, of the Ass and Mule. This he treats at length, and *con amore*, and gives two well-authenticated instances of a mare mule breeding.

The Philadelphia edition of the Horse, is a handsome octavo, with numerous wood-cuts and neatly bound, and is afforded at the low price of $2. We trust that it may have, as it richly deserves, a large sale.

THE AMERICAN RAILROAD JOURNAL, AND MECHANICS' MAGAZINE, *monthly,* 32 *pages octavo, price* $3 *a year, edited by George C. Schaeffer and D. K. Minor.*—We are glad to see this excellent periodical revived, and now have the first 5 Nos. of Vol. I. of the Third Series before us. Such a work is much wanted in the United States, and we trust that it will receive that encouragement from the public which it so highly deserves.

THE PLANTER, *published weekly, in newspaper form, by Dubose & Johnston, at Columbia, S. C., at* $2.50 *a year. J. J. Dubose, editor.*—We are favored by the first 3 Nos. of this paper, and find nearly half its pages filled with original and well-selected agricultural matter, and we wish the publishers success in their useful undertaking.

THE SECOND ANNUAL REPORT *of the American Institute, on the subject of Agriculture,* just published as a Legislative document, is an excellent and interesting pamphlet of upward of 100 pages, from which it is our intention to cull some extracts next month. It represents the Institute in a flourishing condition, the receipts for the past year having been $8,885.90, and the expenditures $8,724.87, leaving a balance in the treasury of $161.03.

OBITUARY.—We learn with deep regret from the Virginia papers of the past month, of the death of the distinguished writer, and practical agriculturist, Hon. James M. Garnett, at his residence near Loretto, Essex county, Virginia. We were not personally acquainted with Judge Garnett, but had occasionally corresponded with him, and several of his communications have appeared in this paper. He has also been for a long time a voluminous contributor to the agricultural press, more generally in his own and this state. These papers have usually been widely circulated and copied, and have been the means of effecting much good for agriculture. They were written in a pleasing style, and abound in thoroughly practical matter.

But a short time previous to his death we received a letter from Judge Garnett, complaining of feeble health; yet we little thought to hear of his being so soon numbered with the dead. Of his personal history we have slight knowledge, and hope that a memoir of him will soon appear from some member of his own family, which will be received and read here at the north with much interest, for few were more generally known by reputation among our agricultural community, or more highly appreciated than James M. Garnett.

TO CORRESPONDENTS.—Americus, J. R. Barbour, and W. H. Sotham, were unavoidably postponed in making up the paper. They shall appear in our next. We are in receipt of communications from A. Beaty, William Partridge, S., M. W. Philips, R. L. A.

FOR SALE—Village Property, Improved Farms, and Grist Mill.

The subscriber offers for sale his Residence, the adjoining Dwelling-house and Store, and the Tavern Stand, "Bainbridge House," all situated on the public square (opposite the Presbyterian and Episcopal churches), in the beautiful village of Bainbridge, Chenango county, not surpassed for beauty and healthfulness, by any village west of Catskill, being in the valley of the Susquehannah, and on the bank of that much-admired river. The Dwellings are each double two-stories, with suitable outbuildings; the Gardens large; and the court-yards well supplied with various kinds of shade Trees and Shrubbery. The Store is two stories, in the centre of the village, and well arranged for business. The Tavern House is a large two-story Building, with Piazza the whole front, on the square, in good order, and with a suitable Barn and Sheds. The occupant is doing a good business. The Grist Mill is adjoining the village and Corporation, has two run of stone, and a good share of business, and five acres of land attached, with a small convenient dwelling-house to accommodate the miller.

Fifteen valuable Improved Farms of 100 to 300 acres each, with Houses, Barns, Sheds, and Apple Orchards sufficient for their use, situated in the immediate vicinity of the villages of Unadilla, Bainbridge, South Bainbridge, Bettsburgh, Ninevah, and Harpursville. Several of these farms are adjoining the New-York and Erie railroad, as laid out, and are of the first quality dairy farms, now stocked, which might be had with the farms if desired.

Also the "Vallonia" Spring House Establishment, with 90 acres of land adjoining the New-York and Erie railroad, including a good House, well fitted up for boarders, a new Store, with a small Dwelling-house, and suitable Out-buildings, Barn, Sheds, &c. This spring is mineral, and at present much frequented by invalids for its medicinal qualities; and upon the completion of the railroad will no doubt be a fashionable resort for those in quest of health or pleasure, it being delightfully situated in a healthy and picturesque county. The above property will be sold in parcels to suit purchasers; and a large proportion of the purchase money may remain on bond and mortgage, for a term of years, at the option of the purchasers, or it would be exchanged for improved property in the city of New-York or Brooklyn. Inquire of T. T. Kissam, 169 Maiden Lane, (corner of South St.) New-York city, or of the subscriber, at Bainbridge, Chenango county, N. Y.

PETER BETTS,

WHEAT-SHEAF FARM ON STATEN ISLAND FOR SALE.

A recent domestic bereavement has induced the undersigned to offer his residence on Staten Island for sale. It is situated midway of the outer bay, on the sea-shore, eight miles from the Quarantine ferry, three from that of Rossville, and equi-distant from two others—Seguin's landing, and Port Richmond.

The condition of the Farm, the extent, value, and practical usefulness of the improvements, and its peculiar advantages, are sufficiently known. It has been improved in a way to render it susceptible of six farming divisions of thirty acres and upward each, including an appropriate allotment of woodland; each division offering a moderately elevated building location. The condition of the soil is well known to be in the best working order.

Terms to suit the purchaser, as the object is merely to change the investment for another susceptible of equal product.

W. A. SEELY,

New York, Feb. 16, 1843. 218 *Fulton street.*

SHEEP FARM FOR SALE.

The subscribers offers for sale, or to let, their extensive Sheep Farm, situated in La Salle county, State of Illinois. The Farm consists of upward of 1,500 acres; over 400 being enclosed by substantial picket-fence, and improved; the balance, dry rolling prairie, and timber, most admirably adapted to sheep husbandry, for which purpose it has been used by the subscribers for the last two years successfully.

The Flocks of Sheep can be sold at the same time, if purchasers are inclined. They consist of over 1,500 good, strong, healthy, white-faced Cheviot breed; also, three fine Pauler Merino Bucks, purchased of a celebrated breeder at the east.

If the Farm can not be sold for cash, offers will be received for renting the same for two or three years.

Apply either to JOHN ROSE, Little Vermillion, La Salle, MURRAY & WARD, Chicago, Ill., or JAMES MURRAY & Co., Buffalo, New York; either of whom will give every information wanted.

POUDRETTE as a Top Dressing for Corn, Cotton, and Tobacco.

This manure has been found highly efficient as a top dressing for corn, and there can be no doubt that it will prove expeedingly valuable as a top dressing for *cotton* and *tobacco*. *One gill* applied to the hill of corn at the first, or *even* at the *second* hoeing, will make six to ten days' difference in the maturing of the crop—which oftentimes will save the crop from frost—one *third* to one *half* a gill to a stalk of cotton or tobacco, will astonish those who have never witnessed its effects, and abundantly repay the expense by the increased crop. To the cotton and tobacco planter residing near navigable waters, it will be found of great value, as it may be applied with as little labor as plaster, and at either period of dressing out the grounds.—Poudrette of an excellent quality may be had in Philadelphia, Baltimore, Richmond, Wilmington, Charleston, and Savannah; or of the New-York Poudrette Company, 23 Chambers St. New-York, by enclosing the money—$5 for 3, $10 for 6, or $15 for 10 barrels—to D. K. Minor.

Sale of Durham Cattle, Hereford Bulls, and South Down Sheep.

The subscriber, desirous of reducing his stock, will offer for sale at auction, on Wednesday, the 13th of September next, at 10 o'clock *a. m.*, at Three Hills Farm, 3½ miles west of the city of Albany, on the Cherry Valley road, 25 head of cattle, consisting of bulls, cows, heifers, and calves, and between 70 and 80 head of South Down sheep, comprising bucks, breeding ewes, yearlings, and lambs, bred from the stock imported by Mr. Hawes, in 1832, and from bucks imported since.

Messrs. Corning and Southam will also offer at the same time and place, some of their celebrated Hereford bulls of different ages.

C. N. BEMENT.

Three Hills Farm, Albany, June 1st, 1843.

Works pertaining to Agriculture for sale by Saxton & Miles, 205 Broadway.

Johnston's Elements of Agricultural Chemistry and Geology, 50 cents; Do. do. 1 vol. 12mo, $1; Gray's Botanical Text Book, $1 50; Lindley's Horticulture, $1 25; Gray's Agricultural Chemistry, $1; Downing's Landscape Gardening, $3 50; Do. Cottage Residences, $2 50; Liebig's Orgmic Chemistry, $1 25; Do. Animal Chemistry, $1; Buel's Farmer's Companion, 87 1-2 cents; Fessenden's Complete Farmer, 87 1-2 cents; Cobbet's American Gardener, 75 cents; Blacklock's Treatise on Sheep, 50 cents; The American Farmer's Instructor, $1 62; A Treatise on Cattle, $2 50; Dana's Muck Manual, new edition, 62 1-2 cents; Boswell's Poultry Yard, 50 cents.

BEVAN ON THE BEE—CHEAP EDITION.

THE HONEY BEE; its Natural History, Physiology and Management. By Edward Bevan; with thirty-five engravings on wood. *Price* 31 cents.

THE RURAL AND DOMESTIC LIFE OF GERMANY, with characteristic sketches of its cities and scenery. By William Howitt. *Price* 50 cents.

AN OFFER.—VOLUME FIRST of the American Agriculturist, complete, with title page and index. *Price* one dollar, stitched. Bound in cloth, $1 25. Persons paying *two dollars*, may have the first volume in neatly-bound cloth, and the second volume in numbers, as published.

SAXTON & MILES.

CHARCOAL & CHEMICAL MANURES.

The subscriber has 5 to 1000 bushels of fine Charcoal Screenings, which he offers for sale, at 12½ cents per barrel. He can also supply compound guano manure, and any of the other chemical manures, such as sulphate soda, sulphate of ammonia, &c. He will give estimates of cost of any composition that farmers may require for experimenting, &c., upon application, post paid. Engaged in the chemical manufactures for 30 years past, he feels confident of giving satisfaction in the articles ordered.

April 21. JOHN BARLING,

Commercial Works, Jane St., between Washington and West streets.

THE AMERICAN AGRICULTURIST.

Published Monthly, each number containing 32 pages, royal octavo.

TERMS—One Dollar per year in advance; single numbers, Ten Cents; three copies for Two Dollars; eight copies for Five Dollars.

Each number of the Agriculturist contains but One sheet, subject to newspaper postage only, which is *one cent* in the State, or within 100 miles of its publication, and *one and a half cents*, if over 100 miles, without the State.

ADVERTISEMENTS will be inserted at One Dollar, if not exceeding twelve lines, and in the same proportion, if exceeding that number.

☞ *Remit through Postmasters, as the law allows.*

Editors of Newspapers noticing the numbers of this work monthly, or advertising it, will be furnished a copy gratis, upon sending such notice to this Office.

Volume 1 of THE AMERICAN AGRICULTURIST, with table of contents complete, for sale at $1; handsomely bound in cloth, $1 25. It is a neat and tasteful book, and makes a handsome premium for distribution with Agricultural Societies; to which, when several copies are ordered, a liberal discount will be made.

☞ To prevent confusion, all letters merely ordering this work, or enclosing money for subscriptions, should be addressed to Saxton & Miles, 205 Broadway, post-paid or franked by the Postmaster.

Communications for publication, to be directed to the Editor; and all *private* letters, or those on business disconnected with the paper, should be addressed, simply, A. B. Allen, 205 Broadway, New York.

REVIEW OF THE MARKET.

PRICES CURRENT IN NEW YORK, MAY 25, 1843.

ASHES, Pots,	per 100 lbs.	$4 62½	to	$4 75
Pearls,	do.	5 50	"	5 56½
BACON SIDES, Smoked,	per lb.	—	"	—
In pickle	do.	4½	"	4½
BALE ROPE	do.	6	"	9
BARK, Quercitron	per ton	22 00	"	23 00
BARLEY	per bush.	40	"	45
BEANS, White	do.	1 12½	"	1 25
BEEF, Mess	per bbl.	7 25	"	8
Prime	do.	5 75	"	6 25
Smoked	per lb.	7	"	7½
Rounds, in pickle	do.	4½	"	5½
BEESWAX, Am. Yellow	do.	28	"	30
BOLT ROPE	do.	12	"	13
BRISTLES, American	do.	25	"	65
BUTTER, Table	do.	13	"	15
Shipping	do.	6	"	10
CANDLES, Mould, Tallow	do.	9	"	12½
Sperm	do.	20	"	35
Stearic	do.	19	"	24
CHEESE	do.	5	"	7
CIDER BRANDY, Eastern	per gal.	43	"	45
Western	do.	25	"	30
CLOVER SEED	per lb.	5½	"	7
COAL, Anthracite	2000 lbs.	4 50	"	5 25
Sidney and Pictou	per chal.	—	"	—
CORDAGE, American	per lb.	11	"	12
CORN, Northern	per bush.	56	"	57
Southern	do.	53	"	55
COTTON	per lb.	5½	"	9½
COTTON BAGGING, Amer. hemp	per yard.	—	"	—
American Flax	do.	—	"	—
FEATHERS	per lb.	19	"	28
FLAX, American	do.	7	"	7½
FLAX SEED, rough	per 7 bush.	9 00	"	9 25
clean	do.	—	"	—
FLOUR, Northern and Western	per bbl.	4 81½	"	—
Fancy	do.	5 00	"	5 25
Southern	per bbl.	4 50	"	4 75
Richmond City Mills	do.	5 50	"	—
Rye	do.	2 87½	"	3 12½
HAMS, Smoked	per lb.	6	"	7½
Pickled	do.	4½	"	5½
HAY	per 100 lbs.	42	"	44
HIDES, Dry Southern	per lb.	8½	"	9½
HEMP, Russia, clean	per ton.	200 00	"	205 00
American, water-rotted	do.	140 00	"	180 00
do dew-rotted	do.	90 00	"	140 00
HOPS	per lb.	9	"	12½
HORNS	per 100	1 25	"	5 00
LARD	per lb.	5½	"	7½
LEAD	do.	3½	"	—
Sheet and bar	do.	4	"	4½
MEAL, Corn	per bbl.	2 62½	"	2 87½
Corn	per hhd.	12 75	"	13 00
MOLASSES, New Orleans	per gal.	21	"	22½
MUSTARD, American	per lb.	16	"	31
OATS, Northern	per bush.	26	"	29
Southern	do.	21	"	23
OIL, Linseed, American	per gal.	78	"	83
Castor	do.	60	"	75
Lard	do.	65	"	70
OIL CAKE	per 100 lbs.	1 00	"	—
PEAS, Field.	per bush.	—	"	—
PITCH	per bbl.	1 12½	"	1 25
PLASTER OF PARIS	per ton.	2 12½	"	2 31
Ground, in bbls	per cwt.	50	"	—
PORK, Mess	per bbl.	9 25	"	10 00
Prime	do.	7 25	"	7 75
RICE	per 100 lbs.	2 25	"	2 87½
ROSIN	per bbl.	87½	"	1 06½
RYE	per bush.	65	"	66
SALT	per sack	1 40	"	1 43
SHOULDERS, Smoked	per lb.	3½	"	4½
Pickled	do.	3	"	3½
SPIRITS TURPENTINE, Southern	per gal.	35	"	37
SUGAR, New Orleans	per lb.	4	"	6½
SUMAC, American	per ton	25 00	"	27 50
TALLOW	per lb.	6½	"	7½
TAR	per bbl.	1 37½	"	1 50
TIMOTHY SEED	per 7 bush.	11 00	"	14 00
TOBACCO, per lb		3	"	7
TURPENTINE	per bbl.	2 50	"	2 75
WHEAT, Western	per bush.	93	"	95
Southern	do.	—	"	—
WHISKEY, American	per gal.	20	"	21
WOOL, Saxony	per lb.	32	"	37
Merino	do.	30	"	32
Half-blood	do.	25	"	27
Common	do.	18	"	22

New York Cattle Market—May 24.

At market, 768 beef Cattle, fresh, (320 from the south,) 110 Cows and Calves, and 465 Sheep.

PRICES.—*Beef Cattle.*—All at market but 30 taken at $5 *a* $7 50 for retailing quantities, to $4 *a* $4 75 for ordinary and inferior.

Cows and Calves.—Sales of 80 at $18 to $25 *a* $30.

Sheep.—Sales at $1 75 to $2 50 *a* $4 50 for extra lots. Left, 30.

REMARKS. *Ashes. Pots* are in quick demand for export; *Pearls* the same. *Cotton*, notwithstanding the slight depression of the lower grades of this article in Europe, prices continue the same as at our last, and very little doing. Our accounts from the south are anything but flattering for the coming crop, and we again repeat to the planters, that, in consequence of this, the superabundance of money, and the gradual rise in other agricultural products, they ought not to submit to any further reduction, in sales of what they may at present have on hand. Exports from the United States since 1st September last, 1,737,074 bales; same time last year, 1,190,544; same time year before, 1,039,339. *Flour* is scarce, and rather wanted. *Grain*, active; little or no *Wheat* in market. *Molasses*, firm. *Naval Stores*, the stock here principally on board ship, for export. *Provisions. Pork*, very little on hand; prices have advanced, and there is a good demand for export. *Beef* is firm, and not much doing. *Lard* is rather dull. *Butter* and *Cheese*, the same. *Rice*, little demand. *Sugar*, active and prices rising. *Tobacco*, dull. *Wool* has advanced.

Business generally looks promising for the farmer and planter, and we have no doubt that the coming crops will be of quick sale, and at higher prices. Wheat generally is promising, although we hear of some suffering, south of us, from winter-kill, and the Hessian fly. The wire and cut-worms are at work among the corn, and have made a second planting, in a few instances, necessary. Grass looks well, and the spring crops are fairly got in.

Money continues a real plethora, and good paper much sought after, and is done occasionally as low as 4 per cent. Specie continues to flow in upon us by every European arrival. It is supposed that three millions at least have come in the past month, principally for investment on foreign account.

Stocks, in a few instances, have advanced, and we are gratified to say, that they have at length taken a start in Europe, and New York stocks are quoted in England 2 to 3 per cent. higher than they were by our last advices. Our states have only to persevere in providing for a regular payment of the interest, to bring up even the most depressed to par, or nearly so; a matter that they are bound, by every principle of honor and justice, to see done without delay.

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